# THE DENTAL DIGEST

AUGUST 1911
VOL XVII NO. 8
SEORGE WOOD CLAPP DD

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# THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., Editor

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Vol. XVII

AUGUST, 1911

No. 8

#### THE GREATEST THING IN ORAL HYGIENE

By George Wood Clapp, D.D.S., New York.

(Continued from June issue \*)

Selma Perlick-age 13-Grade 5th:

Family of nine, seven children. Father a carpenter.

A neglected-looking child. Teeth decayed and stained. She comes from a poor family, where she is raised with no thought of system. Has been exceedingly troublesome to the principal of the school and was not dependable. Since her dental work has been done, her teeth are in good condition. She is faithful in the care of them now. The principal reports that she is improved in conduct and appearance, and is stronger physically. Has had no illness all winter.

Had ten teeth that required fifteen amalgam and two cement fillings.

#### SCHOOL RECORD.

#### Two years behind grade.

									•									
Scholarship	(at	time	of	enterin	ıg (	el	as	88	).									Fair
Effort				66			66										 	Fair
Attendance				44			66											Fairly Regular
Conduct	"	66	66	"			66				٠						 	. Fair
Scholarship	(at	prese	ent	time).									 					Fair
Effort	66	66		66						 			 				 	Excellent
Attendance	66	66		66		. ,							 					Regular
Conduct	66	66		66														Fois.

<sup>\*</sup> This article was commenced in January issue.

#### PSYCHOLOGICAL RECORD.

			Per Cen	t. of
	Beginning	Present	Gain or	Loss
Memory	53.3	56.65	6.2%	
Spontaneous Association	34.65	41.25	19. %	
Addition	37.	38.	2.7%	
Association by Opposites	45.	62.	37.7%	
Quickness and Accuracy of Perception	37.25	46.75	25.4%	

Or a total gain of 18.2%, after deducting the losses.

#### Samuel Katzel-age 15 years-Grade 6th:

Family of eleven, eight children. Father has a small grocery.

Mouth was in bad condition. He was apparently a healthy boy, but there is an improved complexion, and greater efficiency in every way. He is teeming with life and interest, and faithful in all his work.

Had two bicuspids with exposed pulps which were devitalized and roots filled. Twelve other teeth required insertion of nine amalgam, fifteen cement, and one gutta percha fillings. These teeth were very sensitive and needed many analgesic treatments.

#### SCHOOL RECORD.

#### Two years behind grade.

(at	time	of	entering	class)															. Good
66	66	66	66	66															. Very Irregular
"	66	66	66	66															. Poor
(at	prese	ent	time)																. Good
66	"		66							۰				۰					. Excellent
66			66												۰				Regular
"	66																		. Good
	(at	(at prese	(at present	(at present time)	(at time of entering class)														

#### PSYCHOLOGICAL RECORD.

			Per (	Cent. of
	Beginning	Present	Gain	or Loss
Memory	44.9	50.	11.2%	
Spontaneous Association	41.2	44.5	8. %	
Addition	76.	66.		13.1%
Association by Opposites	43.	60.	39.5%	
Quickness and Accuracy of Perception	42.2	53.7	27.2%	
Or a tota	l gain of 14	.6%, after	deducting	g the losses.

Lillian Gottfried-age 14 years-Grade 7th:

Family of ten, eight children. Father agent for lace and household furnishings.

Had a very bad mouth-teeth coated with green stain. Filling that

had to be done immediately. She was naturally a strong girl, but had some trouble with constipation, which is now cured. Complexion clearer. She has improved mentally, and her mouth is now in splendid condition, and beautiful.

Had exposed pulps in a bicuspid and a molar. They were devitalized and the roots filled; and thirteen other teeth need filling. Eleven amalgam and fifteen cement fillings inserted.

#### SCHOOL RECORD.

Scholarship	(at	time	of	enteri	ing	5	cl	a	88	)		 	. ,							. Good
Effort	66	66	"	66				66				 								. Fair
Attendance		66						"				 					 			. Irregular
Conduct	66	66	66	"				66											×	. Good
Scholarship	(at	prese	nt	time)							٠			 ٠						. Good
Effort	66																			. Excellent
Attendance	66	4.6		6.6													 			. Fairly Regular
Conduct	66	66		66																. Good

#### PSYCHOLOGICAL RECORD.

			Per (	Cent. of
	Beginning	Present	Gain	or Loss
Memory	48.3	61.6	27.5%	
Spontaneous Association		57.8	20.9%	
Addition	37.	28.		24.3%
Association by Opposites	51.	62.	21.5%	
Quickness and Accuracy of Perception	43.5	54.2	24.6%	

Or a total gain of 14.04%, after deducting the losses.

Average of school grades at the beginning of work, 81%. Average of school grades Nov. 28th to Jan. 23rd, 91%.

Rachel Somers-age 14 years-Grade 4th:

Family of nine, seven children. Father is employed as a sail-maker.

Mouth in bad condition, gums and teeth diseased, teeth coated with green stain. A bad case of constipation, was poorly nourished. Always looked tired, forlorn and neglected. To thoroughly appreciate change here, we wish all those interested in this work could have seen this girl in the beginning. She comes from a very poor, dirty home. Home surroundings have not changed in the least; but the girl is improved, in spite of it all. Constipation cured; is stronger, clean and neat in appearance; and has a beautiful, clean set of teeth now. Has been well all winter, although coming in contact with contagious disease, using practically the same entrance with the afflicted family.

Had eight teeth decayed, requiring eleven amalgam fillings.

#### SCHOOL RECORD.

#### Four years behind grade.

Scholarship	(at	time	of	enter	in	g	(	cl	a	SS	;)									. Fair	
Effort	"	66	"	66					66							 				. Good	
Attendance				66					66							 				. Poor	
Conduct	66	"	"	66					66											.Good	
Scholarship	(at	prese	ent	time)													. ,			Fair	
Effort	66	"		66																. Good	
Attendance	66	66		6.6																Fairly	Regular
Conduct	66	66		66																Good	

#### PSYCHOLOGICAL RECORD.

			Per (	Cent. of
	Beginning	Present	Gain	or Loss
Memory	36.6	36.6		
Spontaneous Association	36.3	52.8	45.1 %	
Addition	32.	26.		18.75%
Association by Opposites	32.	40.	25. %	
Quickness and Accuracy of Perception	43.	47.5	14.65%	

Or a total gain of 13.2%, after deducting the losses.

Before Treatment



ANNA PANKUCH

Anna Pankuch—age 11 years—Grade 6th:

Family of twelve, ten children. Father has a small printing office.

This child had never used a tooth-brush. Teeth were coated with green stain and needed treatment. It was difficult for her to learn how to use the brush. She was small After Treatment



ANNA PANKUCH

and delicate, poorly nourished, and suffering from kidney trouble. Since her work was completed, she has sprung up vigorously, is stronger, with splendid color. In visiting her from time to time, the Dental Nurse has been impressed with her rapid growth and steady improvement mentally. Since mastering the use of the brush, she is one of the faithful ones of the class.

Had seven teeth filled, requiring eight amalgam fillings. Molars needed analgesic treatments.

#### SCHOOL RECORD.

#### One year behind grade.

Scholarship	(at	time	of	entering	class)	
Effort	66	66	66	66	66	
Attendance	66	46	66	"	66	Fairly Regular
Conduct	66	66	66	46	66	Good

Scholarship	(at	present	time)					 			 	 				Fair
Effort	66	66	6.6													Good
Attendance	66	66	"		,											Regular
Conduct	46	46	66													Good

#### PSYCHOLOGICAL RECORD.

			Per C	ent. of
	Beginning	Present	Gain o	or Loss
Memory	36.6	49.85	36.2%	
Spontaneous Association	49.5	59.4	20. %	
Addition	30.2	24.		20. %
Association by Opposites	49.	66.	34.7%	
Quickness and Accuracy of Perception	42.5	41.75		1.7%

Or a total gain of 11.84%, after deducting the losses.

Before treatment



LILLIAN SEMLAKOWSKY

Lillian Semlakowsky—age 13 years
—Grade 4th:

Family of eight, six children. Father a tailor, employed nine months in the year.

This girl's mouth was in bad condition, requiring a good deal of time for her work. A prophylaxis was necessary at the very first beAfter treatment



LILLIAN SEMLAKOWSKY

fore we could make any impression. She not only neglected the care of her teeth, but was ignorant of the use of them, and bolted her food, especially meat. Was suffering from indigestion, constipation and headaches. A marked change has taken place. She now has beautiful teeth; indigestion and constipation cured. The complexion has cleared so wonderfully that it is just about perfect; and she has developed into an attractive girl.

Had a molar with exposed pulp, which was devitalized and roots filled. Sensitive cavities were treated with silver nitrate, and six other teeth required seven amalgam and one cement fillings.

#### SCHOOL RECORD.

#### Three years behind grade.

Scholarship	(at	time	of	entering	class)							٠		Poor
Effort	66	66	66	"	66						*	,		Poor
Attendance	66	"	66	66	66									Irregular
Conduct	66	"	66	66										Poor
Scholarship	(at	prese	ent	time).									 	Fair
Effort	66	4.6		66										Fair
Attendance	4.6	66												Regular
Conduct	66	6.6		66.										Good

#### PSYCHOLOGICAL RECORD.

			Per C	cent. of
	Beginning	Present	Gain	or Loss
Memory	38.25	43.25	13. %	
Spontaneous Association	42.9	46.2	7.6%	
Addition	16.	14.		12.5%
Association by Opposites	0.	21.	21. %	
Quickness and Accuracy of Perception	36.75	46.5	26.5%	

Or a total gain of 11.12%, after deducting the losses.

Class 4 comprises the pupils who made gains of less than 10 per cent, and the two who showed slight losses.

Frieda Goldman-age 13 years-Grade 6th:

Family of ten, eight children. Father a tailor.

Mouth was in very bad condition, gums diseased. Vitality low, and poorly nourished. Her mouth is now in good condition. She is stronger, and there is a steady improvement, not so brilliant as some.

Had one abscessed molar, and one bicuspid with an exposed pulp, which had to be devitalized. These teeth were saved, besides six others filled. Eight amalgam and one cement fillings.

## School Record. One year behind grade.

Scholarship	(at	time	of	enteri	ng	c	la	38	) .		,					 	. Fair
				46			66									 	. Fair
Attendance	66	66	66	6.6			66								,	 . ,	Very Irregular Fair
Conduct	66	66	66	66			66									 . ,	. Fair
Scholarship	(at	preso	ent	time)								 		 			. Fair
Effort	66	66		66												 	. Good
Attendance	66	44		66												 . ,	. Regular
Conduct	66	44		66												 	. Good

#### PSYCHOLOGICAL RECORD.

			Per (	Cent. of
	Beginning	Present	Gain	or Loss
Memory	44.9	36.6		20.5%
Spontaneous Association		59.4	6.6%	
Addition	34.	27.		20. %
Association by Opposites	35.	51.	48. %	
Quickness and Accuracy of Perception	26.	33.5	30. %	

Or a total gain of 8.8%, after deducting the losses.

Helen Wright-age 13 years-Grade 7th:

Family of four, two children. Father is a bill clerk for the Nickel Plate R. R.

Was a quiet, well-trained child; but her mouth was in bad condition, both teeth and gums. Had indigestion and sick headaches. Since her dental work was completed, she has recovered from these. Is

stronger, healthy and improved in appearance. The mother thanks us profusely.

Had twelve teeth with cavities, requiring seven amalgam and ten cement fillings.

#### SCHOOL RECORD.

Scholarship	(at	time	of	enter	n	g	cl	la	SS	s)	۰		٠						 	. Good
Effort	66	"	"	66				6	6										 . ,	. Good
Attendance	"	"	"	"				6	£								۰		 	Regular
Conduct	66	46	66	66				61	6										 	Fair
Scholarship	(at	prese	nt	time)				٠								۰	٠		 	Good
Effort	66	66		44															 	Excellent
Attendance	66	66		66										 						Fairly Regular
Conduct	66	66		66																Excellent

Psychologic	AL RECORD		Per (	Cent. of
	Beginning	Present	Gain o	r Loss
Memory	29.95	28.25		5.67%
Spontaneous Association		80.85	6.5 %	
Addition	29.	20.		31.03%
Association by Opposites	59.	74.	25.43%	
Quickness and Accuracy of Perception	42.75	62.5	46.19%	

Or a total gain of 8.28%, after deducting the losses.

Ben Dimendstein-age 11 years-Grade 6th:

Family of eight, six children. Father a rag peddler.

Had a number of teeth needing treatment, and some extraction was necessary. Was pale and poorly nourished. Since his dental work has been completed, he shows general improvement, and has grown rugged.

Had three temporary teeth needing attention, as eruptions of permanent teeth seemed backward. These were filled with three cement and two gutta percha fillings; and two temporary laterals were removed.

#### SCHOOL RECORD.

Scholarship	(at	time	of	entering	cla	18	is)	).	٠								Good
Effort		66			4	6											Fair
Attendance		66			4	6											Very Irregular
Conduct	66	66	66	66	4	6									. ,		Poor
Scholarship	(at	prese	ent	time)										 			 Good
Effort	66	66		"												. ,	 Excellent
Attendance	66	66		"										 			Fairly Regular
Conduct	46	44												 			Excellent

Psychologic	CAL RECORD		Per Cer	nt. of
	Beginning	Present	Gain or	Loss
Memory	66.6	48.3	27.47%	
Spontaneous Association	74.2	79.2	67. %	
Addition	46.	40.		13 04%
Association by Opposites	59.	83.	40.7 %	
Quickness and Accuracy of Perception	41.5	46.	10.8 %	

Or a total gain of 2.33%, after deducting the losses.

Before treatment



JAKE BERNSTEIN

Jacob Bernstein—age 14 years—Grade 7th:

Family of seven, five children. Father a junk dealer.

Was found in a very unhealthful home, having practically no ventilation. He was sluggish, and suffering with an extreme case of constipation. His mouth was in After treatment



JAKE BERNSTEIN

bad condition, demanding a prophylaxis before anything else could be done. He now has a beautiful set of teeth, gums healthy and firm. Indigestion and constipation entirely cured. He is bubbling over with life and interest, faithfully carrying out all instructions for care of his teeth, because of the good health he is enjoying as a result. The principal of the school says that this boy is now his teacher's right bower; but in previous years had at times been very unruly.

Had six permanent molars decayed, requiring thirteen amalgam and one cement fillings.

#### SCHOOL RECORD.

Scholarship	(at	time	of	enter	ir	ıg	el	a	SS	;)			 						. Poor
Effort	66	66	66	46				"											. Fair
Attendance		66						44							 				. Fairly Regular
Conduct	"	44	66	66				66								. ,			. Fair
Scholarship	lat	nroce	nt	time)															Good
	(260																		.Good
Attendance	"	66		66											 		,		. Regular
Conduct	66	66		66															. Good

#### PSYCHOLOGICAL RECORD.

		Per	Cent. of
Beginning	Present	Gain	or Loss
51.6	48.2		6.6%
57.7	62.7	8.6%	
19.	15.		21. %
54.	56.	3.7%	
40.5	41.7	2.9%	
	51.6 57.7 19. 54.	51.6 48.2 57.7 62.7 19. 15. 54. 56.	Beginning         Present         Gain           51.6         48.2            57.7         62.7         8.6%           19.         15.            54.         56.         3.7%

Or a total loss of 2-10 of 1%, after deducting the losses.

Scholarship grades at beginning of work averaged 69%. Scholarship grades from Nov. 28th to Jan. 23rd, 88%.

Before Treatment



BEATRICE KRAMER

Beatrice Kramer—age 12 years— Grade 5th:

Family of thirteen, eleven children. Father an iron dealer.

Her teeth were very badly decayed. She has been under treatment the entire eight months; work only just completed. She was troubled with indigestion and constipa-

After Treatment



BEATRICE KRAMER

tion. Complexion sallow and muddy. Entirely cured of both constipation and indigestion now, and there is a marvelous improvement in complexion and vitality.

Had exposed pulps in a molar and bicuspid; both were devitalized and roots filled. Besides this, seventeen teeth were filled, requiring fourteen amalgam, fourteen cement, and three gutta percha fillings. This child had hypertrophied gums, that were also treated and cured.

#### SCHOOL RECORD.

#### Two years behind grade.

Scholarship	(at	time	of	enteri	in	g	el	as	88	)		٠	٠							 	Fair	
Effort	66	6.6	44	66				66													. Fair	
Attendance		66																			Fairly 1	Regular
Conduct	46	66	"	"				66												 	Fair ·	
Scholarship	(at	prese	ent	time)																 	.Good	
Effort .	66	66		6.6															,		Good	
Attendance	66			66																	Regular	
Conduct	66	66																			Good	

#### PSYCHOLOGICAL RECORD.

			Per Cent. of	
	Beginning	Present	Gain	or Loss
Memory	36.6	30.		18. %
Spontaneous Association	39.6	41.2	4.03%	
Addition	35.	27.		22.8%
Association by Opposites	37.	46.	24.3 %	
Quickness and Accuracy of Perception	51.2	52.7	20.9 %	
Or a total	al loss of 1.8	87%, after	deducting	the losses.

A CASE NOTED IN SPECIAL FIFTH GRADE AT MURRAY HILL SCHOOL, DURING DENTAL EXAMINATION, 1910, WITH THE RESULTS OF DENTAL TREATMENT.

Carrie Mangino—Age 13 years—Special 5th Grade—Murray Hill School.

Examination showed: The mouth and gums in bad condition; right upper cuspid and right lower second bicuspid not erupted—evidently im-

pacted, and causing pressure on nerves; cavities in right upper first and second molars, right lower first molar and left lower first molar, which was so far gone as to be beyond saving. Left upper cuspid was projecting outside the arch.

The teacher reported this case as almost hopeless, and said that the child seemed to be under some strain. The child was wearing glasses to relieve crossed eyes.

The diagnosis of impacted teeth seemed to offer relief through dental treatment, and the examiner offered that service, calling also upon the assistance of the teacher and of other dentists.

Dr. E. B. Lodge made X-Ray negatives, locating the missing teeth.

Dr. Guy D. Lovett treated and saved the right upper molar tooth. Dr. D. H. Ziegler gave the anæsthetic and extracted four teeth,

Dr. D. H. Ziegler gave the anæsthetic and extracted four teeth, agreeing with the decision of the examiner in this extraction.

Teeth extracted were upper right and left first bicuspids, right lower first bicuspid and left lower first molar. The extraction of the right bicuspid relieved the pressure of the impacted teeth against the teeth and nerves.

The immediate result was that the child looked different as soon as she came out of the anæsthetic, and the strain seems to have been removed and the eyes are straight. This is best told in the report of the teacher, as follows:

Report of Miss Rowley-Murray Hill School, Feb. 8, 1911.

In 1909, Carrie Mangino, 12 years old, a pupil of the Murray Hill School, was classed Special 4 Grade. She wore glasses to correct crossevedness. Her manner in school was that of a nervous child. Her work and progress were hindered by some great strain. But there were glimpses of hope to tell the teacher that the girl had a good quality of mind, and that she could advance if some physical relief were given. October 18, 1910, Dr. Barnes examined her teeth. For six weeks thereafter her teeth were treated, and finally four teeth were extracted to relieve the impacted teeth. The week following December 17 (the time of extraction), a change in the girl's appearance is noticeable. Her eyes are straightened. In her own words, "I can now see things straight in front." Her nervous manner is gone. January 10.-She seems to be let down from some great strain or tension. January 17.-Improvement in her lessons begins to show. She writes better. Her reasoning power is stronger. She had never read well enough to grasp the thought of a story; she does it now readily. Last year she was a poor, little, nervous, backward child to teach. This year the physical relief has made her a bright, animated, hopeful girl.

Her record for 1909-1910.	Record since Dec. 17, 1910.
ScholarshipPoor	Improved
AttentionPoor	
EffortFair	Good
BehaviorIrritable	Excellent
AppearancePoor	Excellent
Manner	

Approved:

MISS KATHERINE M. ROWLEY, Teacher.

LILLIAN T. MURNEY, Principal.

VARNEY E. BARNES, D.D.S., Dental Examiner.

Editor DENTAL DIGEST:

Permit me to comment on Dr J. Allen Miles's "Answer to 'M. R. F.,' "in your May issue.

In speaking of the loss of a central incisor in a child eighteen months old Dr. Miles says, "I knew that if I left that space unprotected the teeth on each side would grow towards each other and cause the permanent one to be crowded out of its proper position." I should like to inquire if Dr. Miles has ever had a case or knows of a case where that occurred?

The permanent incisors being much wider than the deciduous incisors any spaces the deciduous incisors may retain are insufficient for the permanent teeth to follow. Furthermore, is it not a fact, a matter of common observation, that as the time approaches for the permanent incisors to erupt the deciduous incisors separate, that is, move distally—an expansion, so to speak, of the maxillary bones taking place at these points—until there are decided spaces between all of the anterior deciduous teeth from cuspid to cuspid.

This being true, Dr. Miles's advice to "M. R. F." is fallacious. If followed, the result would be the opposite to what was intended. To bridge from lateral to lateral, in such a case, would prevent the separation, the distal movement, of these bridged laterals necessary to provide the wider space—than the lost deciduous centrals occupied—required by the erupting centrals. Malocelusion would be the result.

This would be particularly true in case of the loss of the superior centrals, early, before the necessary separation had occurred and bridging at such a time.

The deciduous incisors are not space-retaining factors, except possibly in abnormal cases, as are the deciduous cuspids and molars.

J. W. P., MERRILL, WIS.

# THE MAKING OF A GOLD INLAY FROM AN AMALGAM MODEL \*

By Frederick L. Miller, D.D.S., Woonsocket, R. I.

MR. PRESIDENT AND GENTLEMEN:

Your Committee has asked me to talk here this evening about gold inlays, inasmuch as they think that I have devoted more time experimenting than the average dentist, and they thought it would be interesting, particularly at this time, when we are all dabbling in this most interesting branch of dentistry.

I don't wish to convey the idea this evening that I think the method I use is the only method by which perfect results may be attained, neither do I wish to pose as the originator of the method, although we all originate more or less, in our every-day practice.

In calling your attention to these drawings, I want to say that they are not finished drawings, therefore are not correct in detail; they are simply charcoal sketches, made in hopes they might aid me in making clearer what I have to say later on.

As you all know, the making of gold inlays may be divided into two general classes: First, those that are made by the direct method, where the wax pattern is formed in the oral cavity; second, those made by the indirect method or where the pattern is formed on a model of the cavity and contiguous tooth structure. As I make comparatively few by the direct method I am going to explain the indirect method, so will take for my subject, "The making of a gold inlay from an amalgam model."

In case there is anybody here that is skeptical in regard to the fit of an inlay made by the indirect method, I have brought with me a porcelain tooth in which a cavity has been formed. From this tooth an amalgam model was made and on this model an inlay constructed. After the impression of the cavity was taken it was completed on the model, then removed and the cavity surface roughened with a wheel bur. It was seated in the cavity of the original tooth with one or two blows of the automatic mallet, the margins burnished and the surface polished. You will find that you can't unseat it without the aid of forceps or something similar, even though no cement has been used. This filling is held in place by the mechanical construction which consists of cavity preparation, the roughening of the cavity surface, and the burnishing of the margins.

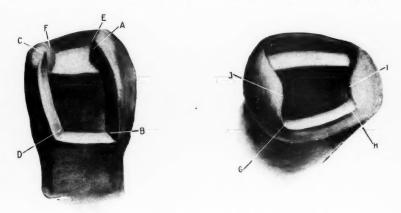
<sup>\*</sup> Read at the Annual Meeting of the Rhode Island Dental Society in Providence R. I., Jan. 10, 1911.

First comes cavity preparation. This in itself, gentlemen, is a very extensive and important subject and I cannot pass it without calling your attention to what I call its most salient features.

1st. Parallel walls. 2nd. A flat base. 3rd. A dovetail where indicated.

When I say parallel walls, I mean as near parallel as we can have them and yet be able to withdraw the impression material.

When I say a flat base, I mean a seat with a decided outline. If you will turn to drawing No. 1, which represents a cavity in a bicuspid



ILL. No. 1.—Mesio-occlusal cavity in bicuspid showing parallel walls, flat base and dove-tail. ILL. No. 2.—Bird's-eye view of No. 1, showing dovetail.

tooth, you will see that AB and CD are the parallel walls, BD the flat base, AEFC the dovetail; this dovetail is shown more clearly in a bird's-eye view of the same cavity, No. 2.

Don't get the part I J too constricted. If you do, you will not be able to seat your inlay, for here is where it will bind. A dovetail whose distance from H to G is but a trifle wider than from I to J, is just as efficient as if it were twice as wide. The part IJ is the weakest part of the inlay, so have the gold wide enough and thick enough (at least 1½ mm. thick), and there will be less danger of fracture of the inlay and no danger of its binding at this part.

Should this cavity extend to the distal surface, forming a mesioocclusal-distal cavity, leaving the cusps frail and thin, it would be better to cut them down and restore with gold. When cutting them down, be sure to bevel the buccal cusp from the pulp outward, the lingual cusp from the pulp inward. The reason for this is that the weakest part of this tooth is where the walls meet the base; by beveling the walls as mentioned and allowing the gold to overlap them, these walls are somewhat protected.

Please notice particularly the cavo-surface angle; it is beveled. It should always be beveled. When once the continuity of the enamel rods has been broken, they lack support and readily disintegrate; by beveling these walls and allowing the gold to overlap, we prevent this disintegration. Where the inlay must resist stress, bevel the walls freely, for a small body of gold, whether cast or malleted, flows under stress. By beveling freely we have a larger mass of gold, thereby preventing the flow.

Parallel walls, a flat base and a dovetail apply to the incisors and cuspids as well as to the bicuspids and molars. Illustration No. 3



ILL. No. 3.—Cavity on lingual surface of central showing parallel walls, flat base and dovetail.

shows a cavity in a central incisor: here ADBE are the parallel walls; AB is the flat base and DCEF is the dovetail.

They tell us these walls should diverge a trifle from the base of the cavity; mesio-distally they should be parallel. I see no reason why they cannot be curved as in the illustration. I believe a cavity constructed after this pattern to be more retentive.

Besides a dovetail for retention we have planes, steps, pits, interlocks, pins, surface resistance, etc.

Illustration No. 4 shows an example of a treatment of an incisor where the incisal edge is thin, introducing a step which involves both the labial and lingual plates. Notice the curve of the pulpal wall (A) also notice that the lingual plate is cut farther up than the labial. Illustration No. 5 is a labial view of the same cavity.

Where the incisal edge is thick the form shown in illustration No. 6 shows the use of a pit; but this should not be used unless the incisal edge of the tooth is thick, for the plates AB must not be left thin.

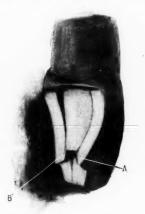




ILL. No. 4.—Lingual view of cavity in central showing a treatment where the incisal edge is thin. ILL. No. 5.—Labial view of No. 4.

Illustration No. 7 shows a different treatment for the same kind of a case introducing another step which involves only the lingual plate.

In teeth that are more worn by attrition and where thermal changes





ILL. No. 6.—Cavity in central where incisal edge is thick, showing where a pit might be used. ILL. No. 7.—Cavity in central where incisal edge is thick, introducing a second step.

so affect the pulp as to make its destruction imperative, a pin might be used as shown in illustration No. 8. Again I warn you to bevel the cavo surface angle, for these enamel plates are thin.

In illustration No. 9 is shown an excellent example of what surface

resistance will do. To the uninitiated this may not seem retentive enough, but it is good practice and I have inserted many after this pattern. The only thing that holds this filling in is the interlock  $(\Lambda)$ 



ILL. No. 8.—Cavity in lower incisor, showing where a pin might be used.

and the large area of surface it covers. The one thing to guard against is to have the filling fit absolutely perfect, and I will show you later how to do it.



ILL. No. 9.—Cavity in molar showing an interlock and surface resistance for retention.

On account of time I intentionally omitted speaking of the outline form, the convenience form, and extension for prevention. Just a word about each. The outline form pertains to the outline of the cavity. Lines should be straight and the curves should be graceful and sweeping because these cavities can be filled better, they are more pleasing to the eye and show the mechanic.

The convenience form is what the word implies, convenience for the operator. The cavity should be so formed that all surfaces can be seen at one time whether looking direct or with the mirror. It means the obliteration of all sharp angles and points. Extension for prevention is the same in gold inlay work as in other fillings.

(This article is expected to be continued in the September issue.)

#### AN OFFICE EXPERIENCE

By Algy F. Strange, D.D.S., LITTLETON, ILL.

I wish to record a history of a case in practice as follows: On March 20, 1909, a young man, proprietor of a steam laundry, in doing some repair work to some machinery, had occasion to climb up overhead, and in so doing caught hold of an overhead shafting and undertook to swing across to an adjoining one, with the result that his weight was too great, and the entire belt shaft, with its heavy pulleys, as well as himself, were subjected to a fall.

The young man fell underneath the shafting, and one of the heavy belt wheels caught him underneath the chin with such force that the inferior maxillary bone suffered a compound fracture at the median line, and the four lower incisors were broken loose, but not knocked entirely out of the mouth.

The superior maxillary bone was broken in such a manner that it, with the process supporting the upper teeth, was entirely free from its joining bones, and when the mouth was opened, dropped down, resting on the lower teeth. In addition to this, it was also broken into three distinct pieces. On the right side, the line of fracture ran through the socket of the first bicuspid tooth, the tooth being split through the root its entire length, the break on the right side taking in all the floor of the antrum. On the left side, the break did not take all the bone of the hard palate, but a piece of process sufficiently large to embody all of the teeth, posterior to the first bicuspid; the anterior teeth were embodied in the process, from bicuspid to bicuspid, and broken off high up, including a portion of the palate bone. All of these teeth were freely movable in their three different sections, but were not loosened from the process which surrounded their roots.

The physician in whose hands the unfortunate young man was placed at the hospital, called the writer in consultation, with the express purpose of having all of the teeth, above, including the process and bony tissues, removed from the mouth and something of an artificial nature constructed to take their place when the young man recovered (in case he did).

Upon examination I concluded that if the teeth and the process embodying them were removed, I could do nothing toward making an artificial substitute, because there would be nothing on which I might clasp, and, as it would have caused a cleft of the palate, no suction could be obtained, and no process on which the plate might rest, so it seemed to

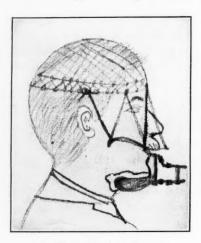
my judgment that the only thing to be considered was to undertake to retain the teeth in their present condition.

This proved to be something of a Chinese puzzle, and caused me to do some studying as to the constructing of something that would hold them firmly in their respective positions. If there had not been a fracture of both maxillary bones, the case would not have been very difficult, but both of the fractures in connection caused me no little worry.

I could not ligate the lower teeth to the upper, and thus hold the lower teeth in their correct relation with the uppers, owing to the fact



ILL. No. 1—Location of fractures, above and below.



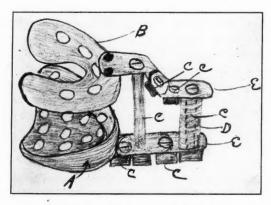
ILL. No. 2.—The two appliances in position.

that the process holding the uppers would move at every muscular movement, as in swallowing, and would in that manner keep from uniting with the bones above.

Neither could I ligate the incisors (lower) together at the median line, as is sometimes practised, as these teeth were all loose in their sockets.

I then proceeded to make splints for each case separately, out of such material as I had on hand; for, being located in a small city, supplies on which to work were limited, so I took advantage of such material as was on hand. I then followed out the following procedure: The physician gave the young man chloroform, and assisted me in adjusting the three pieces above, back as nearly in their proper position as was possible, by holding them in this position while I took an impression of the teeth with wax in an aluminum impression tray. This impression tray, with a model of the teeth in their proper position, was

flasked, the wax boiled out, and rubber placed in its stead, and vulcanized in the tray, holes having previously been punched in the tray to assist in holding the rubber. This was then placed in the mouth, with the teeth fitted into their respective impressions in the rubber. Chloroform was necessary again, as the pieces were too sensitive to be moved or handled with any pressure without the aid of an anæsthetic. When the tray was placed in the mouth, an "Angle skull cap" (one that I had previously used in a regulating case), was placed on the head, and a bar of metal bent in such a position that it would hold the tray up firmly, bringing the pressure as nearly directly upward as was possible. This



ILL. No. 3.—Lower splint, aluminum impression trays "A" and "B," stove bolts "C," hollow metal tube "D," extension of tray handles "E."

ran forward out of the corners of the mouth, and was then bent back around each side of the face, and firmly secured, by means of ligatures, to the skull cap, in such a manner that the upper teeth were held firmly in position.

We next undertook to ligate the lower teeth, at the median line, and found that they were too loose to be of service in this manner, so an impression was taken of the lower teeth, in another aluminum impression tray, and a model of the cusps of the lower teeth reproduced in the tray in rubber in the same manner as was used in the upper. I then made use of another upper aluminum impression tray, to bring pressure to bear upon the chin, and to assist in holding the lower tray firmly in position while in the mouth. From a study of the illustration No. 3, the method can be understood. The handles of the trays were too short to be used for the purpose intended, and were lengthened by use of additional aluminum, held in position by short "stove bolts C."

I then placed a bolt as near the end of the handles as was possible, surrounding it with a hollow piece of metal to hold the handles apart the correct distance at this point, and by means of the longer bolt, as near the mouth as the lips would allow, pressure was secured which brought the trays together sufficiently to make the parts immovable and to so hold them.

The lower splint was worn for about two weeks and then removed; the upper was worn for almost four weeks before being removed, at which time the parts were firmly in position. An opening on the right side, where the bicuspid was removed, extended into the antrum, but has since entirely healed.

The articulation was a surprise to me, and, while it was not perfect, by a little judicious grinding of a few cusps, which struck too hard, it was placed in much better condition than we had hopes of accomplishing.

The young man's teeth were saved (with the exception of the one which was split its entire length) and no condition was left which interfered with speech. It was scarcely noticeable from a "personal appearance" standpoint.

# ARTISTIC SELECTION AND ARRANGEMENT OF ARTIFICIAL TEETH

BY JAMES P. RUYL, D.D.S., BROOKLYN, N. Y.

The average dentist, when he wants to make up a set of teeth, goes to his depot with the color of the central tooth in his hand and matches up all of them to that color. In reality, if he will stop to think and examine the different colors of natural teeth, he will find that they vary from one to three shades in the six fronts, and from one to five in the posteriors. This latter variation, however, is caused in a good many instances by metallic fillings.

It is not my intention to go deeply or scientifically into the matter, but to bring out something of practical use to dentists. To get natural results in color should be our chief aim. The following rule will be helpful in bringing about this end. In the Dentists' Supply Co. models, the numbers in the yellow shades are from 5 or 6 for the incisors; 7 for the canines, and from 8 to 10 for molars. In the S. S. White, from 36 to 38 for incisors, 41 for canines, 38 for bicuspids, and 42 for molars. In the Ash & Sons yellow shades, B2 for

incisors, B3 for canines, B2 for first bicuspid, B3 for second bicuspid, and B4 for molars.

A slight variation in these colors can always be made, keeping in mind, however, the blending of colors; that is, if the ground color is yellow, your different shades must naturally be in the yellow. The same holds good in blues or browns. For those who keep a stock on hand; it is well to select four fronts, canines in pairs, four bicuspids, and four molars. Make a selection this way, instead of getting the whole set offered by the various houses.

Another necessary consideration for promoting naturalness is the size of the tooth. For an upper set, one must be guided by the lower teeth, and for a full upper and lower, by the temperament of the person, and, if possible, when extractions are made, a few should be saved for samples.

In setting up teeth, irregularity is always preferable, but one should not get accustomed to a set method of irregular arrangement, as that would be as undesirable as the usual regular form. Try to work always just as Nature does, who never makes any two things just alike. And here a little corollary might be added, which we find so often true in waxing up teeth; if we could leave them sticking up against the models as they are first set up, trusting, as it were, to our first inspiration, we could get better results.

The occlusion of the teeth is also important. Many make a straight cutting line. Out of a great number of patients, the straight cutting line will be found to be a very rare exception, and then, probably, in an older person's mouth. For them, of course, the grinding surface should be made straight to imitate the worn-out condition of old age.

And right here, in connection with older people, how ridiculous to fit them out with beautiful, white, even teeth! Taking into consideration years of wear, darker colors should be selected, and they should be ground down to a fit semblance of old teeth. It will probably be hard to make people accept this kind, because they have come into the office with a different idea in mind. They think, with the eager sanction of their whole family, that now the old stumps are gone, they can have some fine young teeth of the age of sixteen, but once convinced to the contrary, there will be better satisfaction all around.

The proper fullness of the face should next be considered. This is best accomplished by waxing up the model and following accurately the uneven labial and buccal ridges, instead of making the conventional horse-shoe-shaped plate of the same thickness all around. However, in cases where the anterior teeth have long been extracted, and absorption has taken place, and where the posteriors have been taken out but re-

cently, with little absorption, the proper fullness must be obtained by putting the waxed plate into the mouth, adding fullness when necessary, and taking it off where there is too much.

By following out these lines, treating each case individually and not expecting your mechanical man to do everything, you will be able to obtain results more pleasing, both to your patient and to yourself.

#### INFORMATION REQUESTED

Editor DENTAL DIGEST:

A patient of mine has been reciting to me how a dentist last year removed the pulp from two or three teeth, including a molar. The dentist seemed to have removed them very successfully in that there was very little pain. He went right through a portion of the dentine in the tooth, anesthetized the pulp, filled the roots and put in fillings at the same sitting.

The patient is certain that there was no exposure of pulp previous to visiting the dentist and says he made inquiry as to what he was using. The dentist's reply was that it was cocaine. The patient says cocaine crystals were placed in the cavity and then moistened with a liquid from a dish, and that when the liquid was applied pain was felt for an instant. That was left for a minute and the drilling was taken up with no pain to him until some progress was made, when the application was repeated.

He feels sure that no rubber was applied or pressure used.

I get such results when there is pulp exposure through cocaine pressure, but have no way of reaching pulp in a painless way.

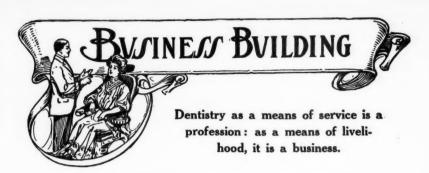
Can you tell me what acid or liquid was probably used to get such splendid results?

The patient is a sterling young man and can be depended on in his explanation of how it was done for him.

My getting his work to do was only because he cannot get to his dentist who has removed from his old location unknown to him.

I am very anxious to get on to this procedure of removing pulps and thought that perhaps the editor of the Digest might enlighten me. Anything on the subject will be greatly appreciated.

C. H.



#### CAN AN INVESTOR READ THE STOCK MARKET?

By Henry Hall, New York City.

Author of "How Money is Made in Security Investments."

Broadly, yes! All the swirls and eddies in prices, No!
It is of importance, however, to the man who has put his savings into securities to be able to gauge the probable success of his ventures, as much as he can, and feel that safety of his capital is not left altogether to chance. He ought therefore to be able to read the stock market, to some extent.

The little turns in prices an investor can neglect. They are of no consequence, and, in any event, can only be predicted by a specialist, and even he must be cautious, keenly alert and of long experience, before he can correctly judge the minor turns. No one can tell anything whatever, in advance, concerning the dips and rallies of 1 and 2 dollars a share. One and two-point twists and changes come and go in half an hour, simply because, out of the thousands of investors and traders, some one of them suddenly decides to buy, or sell, a lot of stock, and that causes a little change in price. Sometimes, in the hurry of speculation, some rule of manipulation is broken, and the trouble must be corrected before the main move is resumed. The larger trading turns of five points or more, a specialist ought to be able to judge, and it is certainly his business to know which way the next twenty-point swing will occur.

The investor should care, principally and almost wholly, and for the broad trend of the market, the main impulse underlying prices; and if he is not too much occupied with his private vocation, he can reason out for himself approximately the prospects of his venture in securities, at any particular time. This cannot be done without a little trouble, of course. But if a man wants to buy a house, or a horse, he certainly would not do so without considering what he could sell it for at some future time. Why not do the same with regard to securities? I am not talking here for the benefit of people in a position of entire financial ease, who can afford to lose a little money. My remarks are for the information of men who have saved something, who do not want to lose it, and who want to add to it, if they can.

Abundance or scarcity of money; state of the crops; balance in foreign trade; railroad earnings; and whether the tariff tends to promote or injure industry,—these are the broad questions which every investor should bear in mind. With a clear idea on these subjects, a man will have the broad view of the stock market, and can regulate his investments accordingly. Patrick Henry's famous declaration, that he could only judge the future by the past, yet applies in investment matters. Certain influences, unhampered, have always produced certain results, in the past. There is every reason to believe, they always will. Therefore, the well-read man, knowing what has happened in previous periods, when certain influences prevailed, can reason out approximately what is likely to happen in the future, under similar circumstances.

After the panic of 1907, any man of sense and information could have figured out the prospects of the stock market for the next two years. The crops had been moderate; but money was cheap, foreign trade was giving a handsome balance in our favor, gold was being heavily imported, railroad earnings began to improve, and a protective tariff was in force. The revival of business after 1907 was a wonder to the world at large, but not to us. It was perfectly evident what was coming, and, as a matter of fact, stocks went soaring upward for two years.

There is no occasion for multiplying instances, both of how any well informed man can read the coming of good times, and the coming of bad times, and thus the course of the stock market. The investor who keeps well posted as to the trend of the five great influences, which affect the value of stocks, can figure out approximately what is ahead and can read the prospects of the market.

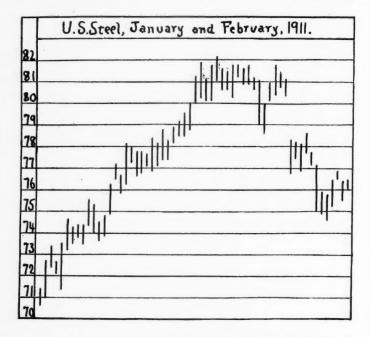
Traders are a different class of human beings. They ought to, but the majority of them do not, care for fundamental conditions. The amateur trader certainly does not. What does he care for conditions, when stocks can smash down twenty dollars a share in a genuine bull market, on some momentary scare, or can rush up wildly twenty dollars a share, in a sure bear market? What the ordinary trader wants is private information, if he can get it, as to the direction of the next twenty point run in stocks. If he goes in at any particular time, having been away or inattentive to what is going on, he wants to know

where the market stands at that moment, and whether to buy or sell short. He lacks the time, as a rule, for the patient and hard study, which is necessary, before he can work out the present position of the market and the direction of the next twenty-point swing. He prefers to consult somebody who ought to know and is willing to pay for the information.

There are a certain number of professional traders, however, the men who devote most of their time to the stock market, who develop systems of speculation. They prefer to be beholden to nobody for suggestions on the market. These people keep careful and continuous records of the action of the stocks they favor, watch how the stocks act under all circumstances, and then try to elaborate rules to govern their operations. Most of them follow mechanical systems of trading. These mechanical rules are curious things. Thomas W. Lawson's famous Almanac had this ingenious remark: "Almost any good mathematical system can beat the ticker to a stand-still - before 10 a. m. and after 3 p. m." This is quite true. Every one of these mechanical rules works out well, on paper; and each one is right just enough of the time to tempt a man to follow it. They all break down, however, at one time or another. They are all idols of gold with feet of clay, and a smash on the foot demolishes them. The trouble with them is, that, after two or three successes with his system, a man is apt to cast discretion to the winds, to forget all about fundamentals, and steer his course only by his chart, whatever it may be. He will then, some day, fall a prey to the big operators, who know that a crowd of men are following a certain system, and who engineer a move in the stock market, expressly to put the system to confusion and out of commission.

Even the big men lose money by too rigid and blind an adherence to their system, some times. No one has ever found out the plan followed by James R. Keene, the prince of manipulators. It is known that he has a plan. He watches the ticker like a hawk; and when some one of his stocks goes up or down a certain amount, he pulls out a little book from his pocket and makes a note therein. But on one famous occasion, Mr. Keene himself was caught napping. He had been engineering a big rise in a certain stock, setting afloat all sorts of rumors to inspire public confidence therein, and when the enthusiasm was at its height, he cautiously sold out all his shares. His system showed the usual signs of distribution, and he knew why. He accordingly went short of it. To his amazement, the very public confidence which he had been so assiduous in creating, was his undoing. Public buying set in in such volume, that the stock bolted up hill like a runaway horse, and Mr. Keene was obliged to cover at a heavy loss.

Gen. Samuel Thomas, a remarkably keen and astute speculator, once had a similar experience. He had been bulling a certain railroad stock, and inducing all his friends to buy it. He thought he knew all about that particular stock, because he was director of the railroad. When it had gone up so much that he did not dare hold on any longer, he sold. He also saw the usual signs of distribution and knew that they were genuine, because he was himself doing the distributing. I have forgotten the figure he sold at, but it was somewhere around thirty.



He did not go short of it, and that was lucky. To his stupefaction, the stock kept going up; and fearful that some developments were coming that he knew nothing about, he bought all his stock back around fifty, and it never went any higher. There again, a pet system went out of commission.

Now in spite of all the weakness of records and "systems," it is a good rule for any man, who has any considerable amount of money at stake in a particular security, to keep at least one chart of its movements. I say this with fear and trembling, lest a man make a fetich of his chart. He must not do that. But all the same, there is a common sense in these matters. Both investors and traders should confine their attention to a very few stocks, not to exceed three or four, and then

should know all there is to know about them, their earnings, the men who manage the properties, how they are affected by dull times and good times, and all that, and among other things the way the stock has risen or fallen in different periods. So it would be well to keep a diagram of price movements, which is simply a record of its performances. A diagram will tell something, once in a while. It will always tell where the stock stands at any given moment, whether it is high or low. It will sometimes show whether, over a period of a month or two, this stock is probably in the stage of accumulation or distribution. That is all that any chart is good for. That is worth something. The only chart that I recommend is one which shows, in perpendicular lines, the high and low price of each day. It is simple and clear and will look as illustrated on page 456.

Every newspaper prints high and low prices, each day, and it is easy to obtain the figures. In this particular chart, there were eighteen days in January and February, 1911, when U. S. Steel hung around the top of its upward move, without going any higher, and without moving very far away from the top. This does not imply that U. S. Steel, common, will not go much higher than eighty-two during 1911; but ordinarily, a fact of that character does imply that, for the time being, the upward movement is over, and that the cautious trader will sell out, temporarily, prepared to go in again on the ensuing reaction, if fundamentals are all right and the prospects of the steel trade are good. Charts must always be taken cum grano salis; but, as stated above, they do occasionally show something, which is worthy of attention, especially in the case of those stocks which are highly manipulated, like U. S. Steel.

This particular form of stock market diagram is a favorite with a number of professional traders. It is especially in use in Boston and New England. In that region, there are many investment companies, which buy and sell stocks only for the long pull and which make a great deal of money, returning handsome dividends, which amount to much more than the legal rate of interest. I have talked with many New Englanders, who base their operations on the foregoing style of diagram. Men who pay a great deal of attention to conditions, and who have kept their charts over a long period of time, so as to become fully acquainted with their strong points and their weaknesses, find diagrams useful, and a help to reading the stock market.

The principal reason why the whole story of the stock market cannot be read from charts is exactly that which will occur to the mind of any sensible man. Conditions govern the trend of prices of all securities. Wall Street is full of men of long experience, who have seen

great fortunes made by persons who have looked ahead far enough to see what the state of trade and industry would be two or three years ahead. They themselves learn to look ahead also; and when they gain a clear conception of what is coming next year and the year thereafter, they form pools in stocks, load up heavily, and hope to sell their holdings eventually at a large advance in price. The pools are all managed by persons of ability, who have a special faculty for stock market operations. The rise is due at first almost wholly to manipulation. During the period of accumulation, operations are conducted quietly. is no bidding for stock. The pools merely take what is offered. But when a pool has all the stock it wants, it begins to buy openly, it makes the stock active, attracts attention to it, induces public buying, and starts the rise. From time to time, the pool sells a certain quantity of its superfluous holdings, but keeps the rest for the final culmination, which may be a year or more ahead. Now, at all times, it is desirable to have a large short interest in the market. Knowing that so many professional traders govern their actions by charts, and knowing absolutely what those charts are, the pools cause their stocks from time to time to look weak on the charts, this encouraging the formation of a short interest. Then, without a word of warning, the market is suddenly turned around and shot upward. The bears are trapped, and their frantic efforts to cover send prices to a new high level. The men who manipulate prices have a way of making stocks look weak, on the charts, and due to go lower, when prices are actually at the bottom; and they can make the charts look strong and promise higher prices, when the market is actually at the top. This is the reason why the whole story of the stock market simply cannot be read from any chart that was ever invented.

Keep the eye fastened on broad underlying conditions, and use a chart for just simply the very few things that it tells.

52 Broadway.

#### WHERE DO YOU CHARGE "RUNNING EXPENSES"?

#### By T. J. ZIMMERMAN

FIFTEEN years it takes to make a business man, according to the general manager of a great industry. Five years to learn his cost of production; five more to learn his cost to run; and the final five to recognize profit and to stand up for it.

Business itself has developed that way. Ten years back the average business man guesses at his production cost just as now he gambles on his cost to operate. To-day most manufacturers are sure of their production cost. They have in organized and even in printed form the com-

parative costs of material at various centers. They know their own direct labor costs, hour costs, output per dollar; they may have even comparative costs of other business and in other industries. The men who progress—plumbers, contractors, laundrymen—have exact records of their main items of basic cost. The merchant knows his invoice cost, his freights, his clerk hire.

Only now and then, however, do you see a business poking its head above the dead level because its pilot knows not only cost to make but also cost to run: knows what must be charged for goods or services in order to make a profit and stands out for it.

Ask the furniture manufacturer the price of lumber; he can tell you to the cent. Ask him his production cost—material and direct labor—on certain lines; he will give it to you carried out to the second decimal. Ask the printer what his pay roll and ink bills were for the month before; he can tell you to the odd pennies. Ask the retailer what he paid for this or that article on his shelf, he knows to the fraction of a cent.

But ask any of these men the total of his running expenses, the items into which his cost of doing business is divided and their amounts; ask him him what proportion of his gross profit is actually net—and you will wait for an answer. He does not know his cost of doing business.

The purchasing agent of a big city firm was placing a booklet job. He sent out specifications to a half dozen printers.

"Why do you bother getting bids on a little hundred-dollar job like this," he was asked. "You have bought printing for years and you must know the kind of work different printers do and their prices."

"There is no *knowing* in the printing business," he answered. "I send out specifications on every little piece of work—and then give the job to the fellow who makes the biggest mistake."

This buyer took advantage of a condition created by the people he was buying from, a condition which they realized and might have remedied. On this particular booklet the bids ran from \$72.00 to \$118.00. But their makers did not really figure—they guessed. And the buyer profited by their mistakes—as the buyer always does; having the long chance and the power to take the lowest bid.

Cost to run is a legitimate expense of business—as much so as the lumber in a chair, the starch in a collar, the wage of the clerk who fits your shoe. It should be included in the selling price. The man who doesn't know all his items of expense, who fails to record or guesses at some of them, is not charging them to customers: he is paying them out of his own pocket.

It is true that no factor in costs offers such an open invitation to lose items as does running expense. There is small likelihood of basic cost getting away: material and labor costs are apparent and recognized, and

selling price is predicated on this prime cost. But the cost to run a business—its cost of living, disregarding the material and direct labor which are re-sold to make income—is vague. Its undefined character in the mind of the average man is apparent in its varying terminology, which shows that the items included are not in themselves clear. One business designates it as "burden;" another as "general expenses." One man calls it "non-productive costs;" the majority colloquially refer to it as "overhead."

The reason for this vagueness is lack of knowledge. The causes behind that are many. Sometimes the accounting system is at fault—not the bookkeeping, the way records are kept, but the judgment determining how expense items should be charged. In other cases the manager, realizing that his expenses are high, decides it is wiser not to bother with accounts, but to give all his time to increasing business—in the hope of catching up with expense and lightening the burden. Or, not bothering to figure his own costs, he adopts a competitor's as his own.

The "rule-of-thumb" method of figuring expense does more to cloud the understanding of costs and put business on an insecure basis than any other single factor. The tradition of "charging 10 per cent. to overhead" expense has ruined more business than lack of capital.

A wood worker who owned several good patents and knew his trade thoroughly started in business in a western city about twenty-five years ago. Material was cheap; his wage scale low. His factory occupied an old building at a nominal rent. Power and heat were furnished by his wastes. He thought his expenses must be much below the average, but charged the customary trade "overhead," ten per cent.

At this figure it stood while the plant expanded. Products became diversified; more capital was taken in; and a considerable line of credit established at the local bank. Then one day the company's balance was wiped out by a judgment in a casualty suit and the manager had to ask an additional loan. The banker demanded an accounting, and put a good cost man to getting the real figures.

The accountant found that the hypothetical ten per cent. was in reality eighteen and a half per cent.—almost double—and had been near that for many years: the manufacturer had been paying half his running expenses out of his own pocket. Fifteen years he and his business absolutely wasted—victims of the ten-per-cent. fetish.

Another type of guesser adopts his competitors' figures. A young paper-box maker just starting in business began figuring on lots for large users. Contract after contract went to his competitors. Finally he lost an order placed by a friend of his; he was able to ask why.

"The price was lower," he learned.

Inquiry developed the fact that the successful concern was paying substantially the same for material and labor.

"It must be, then," the young manufacturer concluded, "that I am figuring my overhead wrong. I know it must be less than these other fellows as I haven't the big organization, high rent and expensive selling methods they have."

He cut his price to fit his competitors'. And lasted only as long as he could live on his meager capital and credit.

In the summer of 1909 a young hardware clerk started a harness shop. He bought his goods from a manufacturer whose field man he knew and arranged that the latter should price the goods for him. Delayed a couple of days, the salesman when he arrived found the new merchant in a cheerful mood, his store open and buyers plentiful.

"Got ahead of you this time," the young dealer explained. "Won't have to bother you. My goods are marked—every last item."

"How did you figure selling prices?"

The answer was characteristic. "A friend of mine went around and priced everything in the other stores. Then I took the lowest price on each article—and marked my goods. I ought to get plenty of trade."

There you have it—the "poor house" price that cleans out more businesses than any other form of mismanagement.

The items missed are not always small. An implement dealer objected strenuously to the average of seventeen to twenty-two per cent. suggested by his association as the proper charge for running expense.

"My expense isn't ten per cent.!" he protested. "I know I'm mak-

ing good money."

"Let's go over your items," the secretary suggested. As they checked them off, it developed that the dealer owned the store and was charging no rent, no interest on investment, no depreciation on stock. He explained that he was "leaving the profits in the business;" and why should he charge himself "for use of his own money and stock?" All he will actually have in his business in five years will be a run-down building, out-of-date machines and some uncollectible accounts.

In another village, a retired farmer with five thousand dollars started selling vehicles. He charged no salaries against the labor of himself and two strapping sons.

"All that comes in profit," he explained. "I don't have to pay out any salaries."

These dealers were not working for themselves; but for their customers. They were making less than a fair profit and would last only so long as was required to consume their surpluses. It was just as if they were handing customers their goods at cost to them and living off their previous savings.—System.

#### A PATIENT'S IDEA OF LACK OF GIVING A PROPER CONCEPTION OF DENTISTRY BY DENTISTS \*

BY H. M. SEMANS, M.A., D.D.S., COLUMBUS, OHIO

Professor of Operative Dentistry, Dental Department, Starling (Ohio) Medical College

This is one of the best articles the editor has seen lately. It comes nearer dentistry as it is daily practised by far too many dentists than articles usually do. No thoughtful dentist can read this, can put himself in this patient's place, can need the relief he sought and not realize how utterly inadequate and belittling was the dentist's conception of his own service, his method of determining the fee, and the fee itself.

Bear in mind that you largely determine what conceptions of dentistry your patients shall have; and your fees are largely determined by those conceptions. See that both are adequate.

Dr. Semans deserves thanks for this article. May we have many more such.—Editor.

"Oh wad some pow'r the giftie gie us
To see oursels as ithers see us."

A FRIEND of mine, let's call him Mr. A-, who happens not to be a patient of mine, approached me one day not long ago with the following dissertation: "Doctor, it surely seems to me that your profession is largely given to belittling a calling or work in life that should take high rank in all communities. In many ways I have been aware of this and I can truthfuly illustrate it by a very recent experience I had myself. Most of my dental work has been of a very light nature, a casual examination and but few fillings, the latter fifteen to eighteen years ago, at which time my father footed the bills. Last winter I experienced a few twinges in the upper right side of my face, and, noticing no break about the teeth, I foolishly attributed it to facial neuralgia instead of toothache; the fact that I was laboring under a severe cold gave weight to my mistaken diagnosis. Early in March I went south to Cuba for a few weeks, and one very hot day I had another sharp attack of neuralgia, but, as before, in a few hours it passed away; on the boat from Havana to Key West I again suffered, this time with intense pain, and my suspicions were aroused as to its being of tooth origin, although I could not definitely think so; however, upon landing, all pain passed away and I gave no more thought to it. In May, while in the East attending to some very important and nerve-racking business, I experienced, for me, a most unusual condition, in that one of my right upper molars commenced suddenly to get entirely too long in its socket, and sore. Say, but it got good and sore! I didn't dare bite down on it; for two or three days I went about, every minute tied right up in business, with my-

<sup>\*</sup> Read before the Columbus Dental Society, September, 1910.

self a day late about returning home, where interested parties were anxiously awaiting me, so you see I easily neglected myself, putting in a most intense night of suffering in the Pullman, every jolt accentuating the agony. In the morning, while still on the train, I realized that my facial contour on the right upper side was fast assuming the aspect of a full round Baldwin apple. Upon landing at home my one engrossing thought was a dentist, and a dentist quick; neither my dear wife's solicitous questionings, nor my children's faces, nor my clients' urgent business could get from my mind that just at this hour of pain and trouble the biggest and most important personage in my native heath was the dentist; all business had to hold up if it took a week; my family must retire to the background until this most serious dental pathological condition had been conquered; relief I must have. Our family dentist was either out of the city or else could not be reached, so I went to a young man whom I knew to be of good repute, with a number of years' experience back of him. Mind you, now, I went into his office with a high regard for his ability to rescue me from my terrible trouble; I knew he had the skill, the intelligence, the ability to do it. I also thought how lucky we people all are to-day in that we are living in the time of highly educated men who by their skilful manipulation and their experience can do wonders for us, whereas but a short time past crude forceps in rough hands were all that humanity could avail themselves of. I explained my troubles, not bearing too much upon the agonizing hours I had had lest he might take me for a baby, yet giving a fair statement of the history of my case, and then with some misgivings I asked whether the tooth could be saved. 'Saved!' says he, after a few seconds' examination, 'oh, yes, I'll clean it out now, put in a treatment; in a few days you return for an appointment, a half hour or so and I'll fix you up in a jiffy; sure this tooth's O. K., the nerve's dead, that's all; got a little abscess up here, that's nothing, get them every day. So you have been down to New York City, you say? Did you like it in Havana last winter? There, come next Monday morning at eleven and I'll fix you up as good as new; guess it's going to rain before night, what?' 'Say, old man,' thought I to myself, 'perhaps it's not so bad after all,' this to myself on the street a few minutes after. Well, to cut in to a finish on my experience, the offender was quickly subdued and filled. 'What's the bill, doctor?' I asked. He looked at me a few seconds, seemed to be cogitating his mind over something and then said, 'Oh, I used amalgam, as the cavity was 'way back; four dollars ought to about cover it.' Well, I paid the four dollars and went away wondering whether he really had properly sized up the seriousness of my case, and I don't

believe he did. I have since talked with two or three other professional men (not dentists) and I am convinced that many dentists do not size up the seriousness of their patients' conditions; they are prone to make light of tooth disorders, nor can I see why they should. If it has much mechanical aspect, like artificial restoration, then they talk out big, but when it comes to the really more skilful restoring of diseased parts of teeth and the mouth, the talk handed out to patients is principally about the weather, local politics, the baseball team and so forth, the patient having had so very pleasant a social time of it that time spent and work done is lost sight of and just a moderate bill often looks big. I've been wondering why this particular dentist hesitated a little bit before he said four dollars. Do you suppose he wondered whether I would think five dollars too much? I, who would have gladly paid a five-dollar bill as a mere retainer fee that first day?' 'No, Mr. A-,' I said, 'he wondered whether he dared go over three dollars." '-The Dental Summary.

#### HOW TO MAKE A DENTAL PRACTICE PAY

By Frederick Crosby Brush, D.D.S., New York City.

One word in this little digest merits especial attention. It is "retainer." It can be used much more gracefully than "deposit." It puts the service on a higher fee. It gives the impression of retaining the services of a skilled attendant, not of buying so much materials. Hundreds of dentists would be better off to have a neatly lettered little card on the sash curtain before the chair reading, "A retainer is expected in advance from all save regular patients," or other words to show the transient that prompt payment is expected.

Dr. Brush has a happy knack at coining phrases. This is one of his best.—Editor.

Just a point about collecting. After the examination has been made and the work agreed upon I step to the desk with the patient and make out the chart, taking the name, address, references, etc. Then I say to the patient: "Your work will probably amount to about so much, how would you like to make the payments?" The patient will, in effect, ask how you expect it. I state that it is customary to have a retainer—I do not like the word deposit—and the balance can be arranged as the work progresses. You thus give them an opportunity to tell you whether they are going to pay the bill or not, and how they are going to pay it, and this is all jotted down on the record at the time and saves questions afterward. If I am not going to get the money I do not want to do the work.—The Dental Summary (November, 1910).

### EXPERIENCES

Editor DENTAL DIGEST:

In answer to an answer, in the May issue—W. Va. to Dr. N. J. in November issue—I wish to add my sympathies to both of the brothers. W. Va. states that he himself came near starving for two years, and I infer, without looking up Dr. N. J.'s article in November, that it was after this time, or space of time, that the weak fell under too much burden, and began the wonderful magic stunt by resorting to the court of last resort, viz.: the so-called campaign of advertising, wherein a wonderful magic was wrought on the public (patients). He goes on to give authoritative advice on such procedures as would tend to mislead our younger brothers, just entering upon their duty, in practically a new undertaking. It would tend to impress on those boys, let me say, that "IT" can be done by advertising to start with, then cut it out by degrees, and wean, as it were, the public and brother Dentist from their disrespect for us. Now, it is a common saying that "if you give a dog a bad name just as well kill him." Well, everybody knows that the saying holds good; then, if the dog (pardon my way of expressing it) adopts a bad name for himself knowingly, he certainly kills himself, in a way. My idea of this is, if a man deserves a bad name, he will get it soon enough, and in the "neck" too, so why begin with the curse of advertising. Everybody knows that a new man can't get a big practice in one or two years, and if he is worthy of respect in his locality, he can certainly make a living, and, in turn, build up a good practice with the best people. Be as good as any; then this expression comes in mind: "Let every man so act each day of his life that he can look any man in the face and tell him to go to ——."

I again congratulate the brothers on having quit advertising, and am sure had either of them held on and not gotten the "blues," they would have made just as much money, more friends, commanded more respect, and had a better class of patients (or at least he could here in S. C.).

Again, W. Va. says one of the profession suggested that he would make good timber for the State society, and on suggestion his name was accepted, without serious objection, he hoped, and if it did it mattered not to him. Well, what do you think of that for society timber? Nay, nay. He then admits that it does pay to attend those State society meetings, and rub up against the other fellows. I am glad that he admits that point, too, and may he be a regular visitor to all meetings available.

Please pardon my lengthy answer, but I felt that W. Va. had

created the wrong impression on the new fellows, and would cause them to go the road to destruction, rather than change after some successful years such as W. Va.'s. Not wishing to take up too much of your valuable space, and with all apologies, I will close, wishing you continued success with the Digest.

Fraternally,

M. A. W.

Editor Dental Digest:

I am answering an article published in the December, 1910, DIGEST under the heading, "When was the root infected?" I noticed in the February issue that it was partly answered, so I have concluded that I would try to answer it in full.

The doctor states a history of devitalization followed by an acute alveolar abscess and cure, root filling and removal of same. Now, the part I want to get at is the treatment after the root canal filling was removed, admitting, of course, that the first operator was at fault for the improper filling of said root. The doctor says on removing filling, "A bad odor" was observed and that "The apical foramen was open." He used oil of cloves and a sterile broach and was careful not to force any débris through the foramen. Now, how does he know the foramen was open if he didn't go through the end? And why did he use oil of cloves?

I don't want to criticize anyone, except in a way that will do good. I want to answer this article, as it seems to me to be a case of misapplied therapeutics more than anything else.

I don't know whether it was the facultative anaerobic class of bacteria left at the first operation or not, and I really don't believe that matters any. Evidently there was some débris left at the first operation and that is where the "Bad Odor" came from, the same as it would from a dead pulp in a perfectly sound tooth.

Instead of oil of cloves, I would suggest formo-cresol wherever the "Bad Odor" is present in root canals, and its presence is readily detected by the nasal organ without going to the apical end with a broach.

Truly yours,

G. W. H.

Answers to the following letter requested: Editor Dental Digest:

Please tell me what should be done with a diploma and a State Board Certificate? Whether they should be framed and hung in the office or not?

Very truly yours,

L. P. H.



## MEETING PRICE COMPETITION

The paper, of which this is the discussion, was read at several important dental meetings. The discussion as here given is that which occurred at the Meeting of the Seventh and Eighth Districts (New York) Dental Societies.—Editor.

#### DISCUSSION

Dr. H. J. Burkhart, Batavia. I shall occupy a very brief space of time in discussing this paper, because it seems to me one of the plainest, simplest, and most fertile papers that I have ever had the pleasure of listening to at a dental meeting in all the years that I have had the pleasure of attending them. It occurs to me that there is so much food for thought in this paper and so many practical ideas and lessons that everyone going away from the meeting can very well profit by them. The essayist illustrates the position of practically every dentist in this room at some time in his own practice, and the cases which he cites are those with which we are very well acquainted. I have not the slightest doubt but that practically every man in this room can point to different intervals or take a leaf out of his own diary which will exactly fit the examples which Dr. Clapp has cited in this paper.

It has always seemed to me that one of the fundamental mistakes the dentist makes is in quoting a lump sum for the restoration of teeth and for the furnishing of the necessary bridges and plates when an application is made to him to quote a price for the whole amount of work to be done. It is not good business for any man to take a chance in quoting prices for something that he does not know all about before he starts, and it is a difficult matter for the most experienced and expert practitioner to say definitely what his services will be worth to place the mouth in a first-class condition.

The age of the dentist who wrote and asked for advice appealed to me very strongly, because about the time we are forty years of age or older we generally realize the necessity for exacting and demanding proper compensation for our services. The young fellow just out of college is always in debt-I say always, for I do not know very many that are not in debt when they leave college—that young fellow is trying to get hold of every patient, and keep every patient that comes into his office by some hook or crook, and if he has the opportunity to fix up a mouth and obtain forty or fifty dollars for it, he figures that while he may not make very much on that particular piece of work, the polite advertising he may get out of it will bring him other patients. And then, again, the young fellow does not realize that price competition is one of the very worst things that he can get into. I do not recall in my own experience a time when I have ever gotten into price competition with anyone. It is true a fellow will lose patients at various times, but it would be far more advantageous to any young man to spend his time reading even the daily newspaper than to be working for a price which is not a living price and which only lowers himself in his own estimation.

The paper is as thoroughly practical with reference to the other case cited, and that is of the ordinary fellow that has the best people in the town and does not have very much trouble in keeping them, because that fellow started out early to educate his patients, and he has taught them the necessity for good dental work and also

the reasonableness and necessity for paying a fair price for that service. A great many of us take ourselves very seriously at times, and we feel that our services are valuable, but the great trouble is we have not the nerve to ask the proper price for this service, and mighty few fellows will take the time to talk to patients or be willing to stand by their guns, especially if they have something ahead of them that they want some extra money for, or they may feel, as a matter of pride, that they do not want the fellow across the street to say that he gobbled one of their patients. It is that feeling of pride that oftentimes prevents us from asking for that return for our services which the work and the value of the service would indicate to the ordinary fellow as he runs.

There is another feature about this price business, and that is that the large majority of dentists are not good business men. That is a self-evident fact to anyone who is at all acquainted with the profession, not only locally, but in various parts of the country. Yet I do not know but that dentists average fairly well with those in other professions and in ordinary business life. Our greatest mistake is in not attending strictly to our own affairs and in not obtaining money enough for our services, so that as young fellows we may commence to form the nucleus for a little nest egg, so that when boys and girls come along to the time for college and school education we will have a little something to take care of them. That thought is causing us to lie awake at night and become nervous for fear we will not be able to give them the advantages we would like to. It has always seemed to me that if dentists would have the proper conception of the value of the services which they render, and would have the proper conception of what high-toned and high-class professional men should ask for their services, and would use a little spare energy in endeavoring to educate the people to the value of this service, we should have little difficulty in getting along and in raising the general standard of the profession.

Dr. F. L. Sibley, Rochester. I have very little to say on the subject. Dr. Clapp has covered the ground so thoroughly in the reading of the paper. I believe we will all profit by the paper very much. He leaves nothing particularly to discuss beyond commendation of his remarks.

I think that dentists, as said before by one of the speakers, are notoriously poor business men, perhaps for the reason that they have never had any business training. Most of us have come from college and have started out on the firing line in the best way we could, and have not conducted our practices in the way we should perhaps.

I only wished to say a little on the subject by way of commending the paper, but I do not believe that I could add anything to what has already been said, and I am sure that the audience would be very glad to hear further from Dr. Clapp.

Dr. A. M. Wilbor, Olean, N. Y. I wish to congratulate the essayist on his very excellent paper, for I heartily approve of the Brother Bill idea.

In our city we dentists have gotten together as a society, and have accomplished much good work along the lines indicated in Dr. Clapp's splendid magazine.

One way in which we are "meeting price competition" is to prevent the people from doing "dental shopping," and this we have done by posting a card in the office of each of our members which reads

EXAMINATION FEE ONE DOLLAR

and now we find that when Mrs. Jones or Mrs. Smith has paid a dollar to find out what it will cost to put her mouth in good condition she hesitates to ask the same question of a brother dentist and pay him also a dollar for his answer.

Of course if the patient returns and has the work done we allow her "Examination Dollar" to be placed to her credit on the whole bill.

We believe thoroughly in educating our patients at the chair—taking time to do this educational work and charging for it. I do not hesitate to tell a patient that I am going to have a little heart-to-heart talk with her regarding her work, and that she will be expected to pay for the time which that talk will require, and I have yet to find the first patient to object to this plan.

I wish to say in conclusion that every man of us fully appreciates the letters

Brother Bill has written, and that they are helping us each day.

Dr. Wm. W. Belcher, Rochester. I had a talk with Dr. Clapp this morning, and he said he did not want anybody to agree with anything he said, as commending a paper was one way of condemning it.

One thing I would like to oppose is, that he speaks of prices. Well, that is all right if a man is conducting a market or grocery, but I think a dentist should have

fees rather than prices.

I am glad to have Dr. Clapp speak of positive assurance in one's office. The public want a man who knows, not one who guesses. I believe in every man being boss in his own office; he is the one who pays the rent, and he should, if necessary, assume this position. Unless you do this, you lose the respect of your patient. Not that a dentist cannot make mistakes, but rather have these mistakes of your own judgment than that of the patient; you, and not the patient, have to assume the burden if things go wrong. Occasionally I have a patient who comes in the office with a story of a filling that has gone wrong. What is the reason? I assure them I do not know for sure, but I suspect that it wasn't put in properly. There isn't any chance for an argument, and many times we find, on examination, that the fault was not with the dentist, and the patient is in a receptive mood to acknowledge this, as you have shown yourself willing to accept your share of responsibility.

Every man can make his practice his own heaven or his own hell; if he lets his patients run his office he is sure to be in hot water most of the time. Perhaps I have gone to the extreme in insisting that patients shall do as I request. As an illustration, I remember several years ago I had for a patient a nurse who had not taken the regular course. She was an old maid, and she had an exalted opinion of her knowledge of dentistry. She presented herself with a sore tooth that had been crowned by another practitioner, who had refused to do anything for her, and she came to me for relief. I advised her to take a hot foot bath, the use of capsicum plasters and castor oil for the faulty bowel conditions present. An appointment was made for future treatment, and at this time she came in with the tooth in an unimproved condition. I said to her, "Did you take the castor oil?" "No." "Did you use the plasters? " "No." "Why didn't you?" "Well," she said, "I did not think it worth while." I then asked her what she wanted me to do, and she said she wanted me to remove the soreness from her tooth. I said to her, "You have done nothing for yourself, you have not done the first thing I told you to do, and I refuse to do anything more for you unless you do something for yourself; unless you do this you must get someone else for your dentist." She said, "Do all your patients do as you tell them?" I said, "Yes, all my patients do; those who do not are not my patients." She said, "Well, I don't blame you for being so stuck on yourself."

In regard to salesmanship, all the poor salesmen are not in the dental offices. How often do you go into a store and hear the man who waits on you say, "Nothing more to-day?" Now, that is a negative statement, and the only answer is NO. A good salesman will suggest that you need other things, and while waiting for your change will show you something to tempt your further purchase. I think we are to blame for not suggesting to patients other and better services.

How often do patients come to you and say that another dentist will work for a certain fee; he only charges \$5.00 for his best crowns, etc. My answer to this is

that the dentist who makes this offer knows better than anyone else the value of his services. But why pay \$5.00 for a crown when the daily papers are full of advertisements of the very best crowns, doubly reënforced, 22 K. gold, warranted for 20 years in writing? The patient will make the statement that they think \$3.00 is too cheap, that \$5.00 is the correct fee, etc. They had thought that dentists' fees were all the same. I ask them, "Do the dressmakers all charge the same price for their work? You know you can have a dress made for \$3.00 or \$30.00." I think this is one of the best arguments you can present to the women folks.

Occasionally a patient will come to me with a request that I work for the maid, that she is poor and cannot afford to pay my regular fees. One lady came to me with this proposition, and I asked her how much she paid her maid. She said, "Thirty dollars a month, and I wish you would work for her and do the best you can in the way of fees." I said, "Well, I will not charge her as much as I do you, because she cannot afford it."

The maid presented herself, and on examination I placed a fee for the work necessary in her mouth. She said, "My, but that is an awful price for that work. What makes you charge so much?" I said to her, "How much are you getting for your services?" She answers, "Seven dollars a week." I said, "Why don't you work for less? You know there are a great many girls only receiving from three to five dollars a week." She replied, "Because I don't have to." "Well," I said, "I don't have to either."

I think we should impress on the patient the fact that we are giving away the materials and selling them our services. That it is not a dollar and a half's worth of gold used in a crown; we are giving them this, but charging them so much per hour for services rendered.

Another thing, we should impress our patients with the value of dental services. Good dentistry is worth more than most anything else that money can buy. Money expended for dental services is only to be compared with money expended for a serious surgical operation or an education. It is different from buying clothes or a new hat or a set of furs: even dining is transitory; but money expended for good dentistry, means more than this—it means health, comfort and happiness.

As we grow older we lose our hair, our complexion, and wrinkles cannot be denied. We can go to the druggist and get our complexion out of a box, the hair-dresser and the mechanical dentist furnish artificial substitutes. We must accept in a large degree that our eyes and other organs are to pay the penalty, and Old Father Time cannot be denied. But with our teeth it is different; this is the one way in which we can fight old age. A man may be seventy in years, but only twenty-five as far as his dental equipment is concerned, or he may be twenty-five in age and seventy years of age dentally. Impress on your patients that they cannot afford to let their teeth get away from them, and age shows itself more quickly from lack of proper attention to the teeth than elsewhere.

I recall the case of a young married woman who came to me with her mouth in a deplorable condition. In the front of her mouth were two dead teeth, black and discolored. So conscious was she of her appearance that she placed her hand in front of her face when talking. She had given up going out in society simply, as she said to me, because she was ashamed of herself. Several of her teeth were with exposed pulps, and eating was a torture. Her teeth were placed in proper condition. She did not have to apologize for her appearance, and could eat and chew her food properly. She and her husband were attending dancing parties, and she was like a young girl and looked it. When she paid me she said, "I feel as though I owed you twice this amount; I am living in another world." And she was.

When I first started practice in Rochester, and a dollar was about the size of a dish pan, an old Irish lady came to me for services: two crowns and a few fillings were necessary. She impressed me with her tale of poverty, and I placed a price of twenty-five dollars for the services. She said she could not afford to pay this

much, it was robbery, etc., she would call again. She did come again and kept coming; she would poke her head in the door and say, "Well, how much to-day?" I said, "Twenty-five dollars." "Well," she said, "I'll come in again." She came, and I was busy. She said, "Are you always busy?" I said, "Yes, Mrs. W——," "How much to-day?" I said, "Twenty-five dollars," and she said she would come in again.

I had ascertained meanwhile that she owned a piece of property worth \$18,000, but it had a mortgage and I guess she felt poor. She finally came in and I treated the teeth and placed the crowns in place, and when she paid me, she said, "There was a fellow down the street that offered to do this work for seven dollars. You are very dear."

I said to her, "If you had taken that seven dollars and thrown it out of the window you could have better done so than let him do your work for that money." Surprised into telling the truth, she said, "I know it."

As we are longer in practice we get more busy, and there is a greater demand on our time, and then comes the problem of what are we going to do with some of our older patients. This is a problem I am facing to-day. I have patients who have paid me good money; they have been good patients, but their financial condition has changed for the worse. It is characteristic of our American life—up to-day and down to-morrow. They come and the children come, and they cannot afford to pay any dentist a decent charge. When I needed help they helped me, and now they are unable to pay. What are we going to do with these patients? Shall we render the services and send no bill, or make the fees so low that they can pay them with self-respect, or are you to send them to someone else?

Then there is the patient who came to you when your fees were lower and your services were not worth so much, and they notice the advance and ask the reason. I say to them, "You pay more for groceries and everything you wear than you did ten years ago?" "Yes." "Well, the dentist has to pay more too. Don't you think he should get more? The only way a dentist can increase his income is to advance his charges." I know of one dentist who has doubled and trebled his fees. He says that some of his older patients come in and tell him they cannot pay these fees, and he tells them they must pay or go somewhere else. His position is, that they have paid him for services that instead of being worth the two dollars an hour he formerly charged were worth as much as the services he is now furnishing them at the advanced rate, and they are under obligation to him and not he to them. Well, I think that is one way of looking at the matter, but I cannot get over the feeling that I am indebted to them for their patronage and confidence when others refused it. Another way is to charge the new patient new fees, and I am following this plan. With the old patients I do the best I can.

Dr. T. C. Phillips, Buffalo. I would like to say a word in regard to an incident which occurred in office practice. Some time ago a patient came to me for a pyorrhea treatment, and I charged something like one hundred and fifty dollars for the case, A short time afterwards she came to the office and told me that her coachman had pyorrhea, and she was going to send him in to me. He came in with a much worse case than that of the woman. I figured that my time was worth so much, and I said to him, "I will treat this case for sixty-five dollars." He was satisfied with the price, and when I finished the case he paid me and was perfectly satisfied. I did not hear any more from him or the lady for some time. Finally the lady came to the office and said, "Doctor, I have got it in for you." I asked her why, and she said, "It was terrible to charge my man sixty-five dollars for his work." I told her that we had agreed as to the fee, and that I did not know any other way than to collect the fee from him as she had not offered to pay for it. I said, "Had I treated you afterwards I probably would not have charged him anything." She said, "What do you mean?" I said, "I probably would have charged the whole bill to you, but as it was I could only get a fee for taking care of him, and so I

charged a fee for the services." I do not think, gentlemen, that we should be afraid to let the public know that we charge people who can afford it a little more than we would for those in more moderate circumstances.

With regard to patients who wish to make contracts for their work, I believe the most satisfactory way to dentist, and patient, is for the dentist to state the amount he will work for by the hour, then the patient as well as dentist can keep account of the work as it goes on, and therefore knows whether it is going beyond what he feels he can pay.

In my own practice, however, I do not object to making estimates when the work is such that I can.

Dr. J. H. Beebee, Rochester. The matter has come out in regard to contracts—a person coming into the office and asking what it will cost to do a whole piece of work or a whole operation, and want to make a contract with you and get it down in black and white and know what it will cost. My answer to that is, "I will do that if you wish. But in this way—I will look the mouth over very carefully and make up my mind as to the full amount that it will cost, and I will add twenty-five per cent. to it. Otherwise you had better let me do it at my price ordinarily, and if you have not enough confidence in me for that, I do not want to work for you." Now there is no man who can take a contract for doing an extended amount of operating in the mouth and do it in a satisfactory way unless he does it in that way, because you are very likely to run into obstacles that will cost you time and labor.

In regard to servants that are brought in by their mistresses to have work done at reasonable charges, I tell them that I cannot do it cheaply, "But I'll tell you what I will do. You are interested in the girl, and I am interested in you. Suppose we charge that girl one-third the regular price, you pay the other third and I do the work one-third the regular fee. How will that do? Or if you do not like that, I will give one-half of the service and you give the other half, and charge the girl nothing." They do not broach that subject to you again soon.

Dr. R. H. Hofheinz, Rochester. I have not heard the paper read, and I do not like to add to my rather unenviable reputation of being a high-priced man. Personally, I believe that the only correct and just way of charging is by the hour. Then you have an influence which will lead you to do the best you can at all times. If you is it by contract, as spoken of here, you may overcharge in the first place, or if the charge is not sufficient, one may do inferior operations. No man can accurately gauge his labor beforehand, so that he can estimate the price within a reasonable amount of what it should be. When patients come to me with that proposition, I refuse to consider it. I tell them that I will do the best I can, and if they do not trust me completely they must not require my services.

Dr. Belcher told us that one of his confrères informed him that some ten or fifteen years ago he charged two dollars per hour, and now six, and that he was giving years ago six dollars worth of service for two dollars. I do not believe in such arguing. Whoever that man may be, fifteen years ago he did not have the experience he has to-day, and if his services were worth two dollars then, they are worth six to-day, because he has much more skill and experience and his patients can afford to pay for this difference. But he has never given his patients six dollars' worth of service and charged only two dollars.

In regard to old patients who have become poor, we all have them, and I have them to-day. I do some work for such people for practically nothing. I cannot afford to do this for all, and I do not expect to start a free dental clinic. There are some people for whom every practitioner must make just such concessions. The question is, what are we to do with the people in general who cannot pay our fees? We either must do poor work for them and charge some fee, or we must do as well as we can and charge them very little, or we must send them to some one else. I think

in most instances the man in full practice is perfectly justified to send these people to the younger men who do honest and faithful dentistry. Every dentist ought to be in position, if he has lived in a city long enough, to know honest and capable younger men, who will do their best work under these circumstances. As a rule, I have had no difficulty in explaining to these people the conditions, and they have been grateful to me for recommending them to younger men, whose time is less valuable, but who are honest and reliable.

In regard to charging servants less than their mistresses, that is a question that has puzzled me more or less in former years. I take the ground that they should not pay as much as the person who recommends them, but that the difference should be paid by the mistress or master if they insist on your own services. Why not apply the same rules to these cases as to the ones I have mentioned? If, however, a mistress or master recommends a servant and is willing to stand the balance of the expense, you should give the best service. One should never do any work whether for five or for fifty dollars excepting the best one can do under all circumstances. I think that is the only honest way to practise anything. The best reasoning I ever heard in this connection was given by Dr. Libbey, of Pittsburg. A wealthy iron merchant came to his office for the first time and said, "Doctor, I have been in the hands of Dr. So and So, and I now want you to do my dentistry. I have lived just long enough to know that there is dishonesty in every trade and profession. If there should be any such thing as dishonesty between you and me, please let it appear in my bill and not in my mouth. I am perfectly willing to pay anything you may charge, but I demand the best service that you can give me." I am sure, gentlemen, that Dr. Libbey gave that man the best services he could, and also rendered an admirable bill.

It is all well enough for an older practitioner to reason as I do. It is different with the young men, and different rules apply to their practice. It is unwise for older practitioners to say that a young man must charge as much as he does. He cannot do anything of the kind. It is illogical to expect the younger man to charge what the older men do, and furthermore he is not entitled to it. The younger man should get the overflow from the older and fuller practices. The mistake is made by a great many older practitioners that they are afraid of losing patients by recommending them to younger men, who will work for lower fees. I think that we as dentists are less broad-minded than members of other professions. Physicians are more apt to send patients to specialists than we are, and in that respect we are certainly narrow-minded. But, gentlemen, there remains this question, do we get for our services what they are worth? I say no. Not even the best paid men get anything like the proper compensation of what other professions get to-day. Think of a lawyer getting a fee of a hundred thousand dollars for a case tried in court for a large corporation, which cost him only four or five months' labor, more or less. Where is the dentist that earns a hundred thousand dollars in a year, or in two, three, or four years? I do not call to mind any non-advertising dentist in the United States who has a net income of twenty-five thousand dollars, and I do believe in the City of Rochester there are more than a half a dozen physicians who have an income of that amount a year. There is a great injustice in regard to our financial remuneration, which is largely our own fault. There is no work more wearing on the nervous system than dentistry, as long as we give the best and most efficient service we are capable of giving, and there is no professional service poorer paid for than dentistry.

Dr. Belcher. I would like to ask Dr. Hofheinz a question. What would he say to a patient who came to him with gold fillings he had placed fifteen years previously at two dollars an hour, and meantime he had raised his charge to six dollars per hour; the patient is dissatisfied with the charge, and you have to look those two dollar an hour fillings right in the face and tell her your services are now so su-

perior that your fee is correspondingly increased. What argument have you to meet this patient?

Dr. Hofheinz. I have seen fillings put in by the greatest slops in dentistry last longer than that. Personally I do not think that is any argument, because it is not only a question of pounding in a tray full of gold in a coronal cavity, that is not all of dentistry. I think that personal knowledge and experience is what should count, and the argument that I made before was that the young men, in a technical sense, are as able as the practitioner of twenty-five years or more. But I do not believe that man knew as much ten years ago, even if he made a gold filling that would stay in the mouth, as he does when he charged six dollars or more. Personally, I think I could pack gold twenty-eight years ago in cavities just as well as I can to-day, and I am quite sure that I could pack it faster than to-day, but that does not signify that I have no more experience in a general way about dentistry, and that my services are not worth more than when I knew as much in a technical way about packing gold as I do to-day.

Dr. Clapp, closing the discussion. I have here a few notes as to questions asked about the paper, and the first is that made by Dr. Belcher as to investments for old age. I do not want to take that up at the present time, because as the result of some inquiries direct to the magazine, we have been searching for the material to supply the right information for dentists about investments, and I hope we shall be able to take that matter, of sound investments for men in our profession, up in a comprehensive manner.

I do, however, want to speak of one aspect of it, and that is investments for children. Last year a man in the South wrote that he had three boys that he wanted to give the proper education, but that when the time came for them to go to college he feared he might not be able to furnish the money for these three boys. He told us that the way he solved the problem was that on the birthday of each of these boys he gave each a hundred dollar bond, which paid five per cent. interest, and put it away in the bank. When the time comes to clip the coupons the money they brought was also put in the bank. When the boys reach the age when they will go to college, they will have the money in the bank for the purpose.

Dr. Wilbor spoke of charging an examination fee. I want to speak of a friend of mine in Detroit who told me sometime ago that he would like to change his methods, and charge for advice if he only could, and recently I called upon him, and he said he had changed his methods. When patients come to him for advice he tells them that his time is never more valuable than when he is giving advice to his patients. He mentioned the case of one patient who asked him if he charged for making an examination. He said "Yes." "Well," the patient replied, "my other dentist did not do that." He said he explained to her why he charged, and she said, "Yes, I see, you consider that your time is worth something. My other dentist never made me think that his time was worth anything."

Dr. Belcher spoke of fees as compared to prices. A dollar for treating an abscess is not a fee, it is a price. Two dollars and a half or three dollars may be a fee, but a dollar is a plain price, and I think that is very likely the reason why the title was made that way.

Dr. Belcher also spoke of salesmen. I myself make it a rule to keep in touch with good salesmen. Only the afternoon before I came to the meeting I went to buy some gloves. The salesman did not ask me if I wanted anything else, he said, "Here are some dollar and a half ties that we are selling for sixty-five cents, and we have only a dozen left." Before I knew it I had bought a tie. He did not ask me if I wanted anything more, but said, "Here is so and so." "No," I said, "I have paid sixty-five cents for my lesson and I am satisfied." I can point you, gentlemen, to hundreds of letters from dentists who are becoming good salesmen.



C. Smedley, 604 California Bidg., Denver, Colo. Every item published in this department will pass through his hands, and to avoid unnecessary delay Hints should be sent direct to him.]

To Cleanse the Hands After Laboratory Work.—Where there is more or less wax, and soot from the flask—first soap the hands thoroughly, then add a small amount of pumice stone; rub well together and rinse in water. This will readily clean the hands and leave them in a normal state.—M. A. Woods, D. D. S.

To Polish Amalgam Fillings Between the Teeth in Approximal Fillings.—After the matrix is removed, insert a thin celluloid strip, such as is used in artificial enamel, between the teeth, and draw back and forth in each direction. This will give the filling a high polish, and leave contact points all right; then burnish slightly the occlusal surface toward the approximal wood.

INVESTMENT MATERIAL FOR BRIDGEWORK.—A good investment material for bridgework may be made by using half and half of some investment material and pumice stone, or pumice and a little plaster of Paris, so as to make bulk set well.—M. A. Woods, D. D. S.

A New Remedy for Burns.—This is simply a lukewarm yeast poultice; either the dry yeast of grain or the wet yeast of breweries. The poultice is applied to the burns as quickly as possible. The pain subsides quickly, and healing is remarkably hastened. From the recent work of Fernbach, it appears that the cellules of the yeast can absorb the bacterial poisons.—Franklin Institute Journal, March, 1911.—(The Dental Brief).

Paraffin Separating Solution for Plaster Impressions.—A saturate solution of paraffin in gasoline makes a very satisfactory separator for plaster impressions. It dries quickly; the cast may be made in a few minutes after the paraffin solution has been applied, and there is no risk of the plaster of the impression and that of the cast uniting. It may be used so thin that none of the fine lines of the impression will

be filled. It is desirable to first color the impression by staining with an aqueous solution of carmine, or other preferred stain.—Dr. A. P. Kilbourne, Stewartstown, Pa., Dental Summary, March, 1911.

Remover for Bandless Crowns.—A remover for bandless crowns has recently been introduced. It resembles closely a pair of strong tweezers provided with a nut and screw to draw the blades together, the free ends of the blades are bent at a right angle, inwardly, and each terminates in a wedge. The wedges are inserted on opposite sides at the junction of the root and crown, and brought together by the screw, thus forcing the crown from the root without injury to either.—Oral Hygiene, March, 1911 (The Dental Brief).

Carborundum files.—Carborundum files are now made that compete with the ordinary steel files, especially when used on hard metals or substances. A carborundum file will remove material that the steel file cannot touch. One such file will outlast twenty steel files, and as they keep sharp, do not clog or glaze, they cut fast and clean. They are useful in a dentist's cabinet to reach places inaccessible to the revolving carborundum wheel, or for fitting dentures when the work is done away from the office and its appliances.—T. M., Dental Brief.

Copper Matrix for Amalgam Fillings.—The method of using the copper matrix, as advocated by Dr. J. A. McLain, is as follows: The matrix is made of sheet copper of 35 or 36 gauge, the thickness depending upon the closeness of the teeth. The copper is annealed, and cut to the desired shape. The metal is then put around the tooth and secured with dental floss. It is important to secure it well at the cervix, which can best be done at the beginning by a rolling hitch. One end is then passed around the tooth one way and the other end the other way, and tied in a surgeon's knot followed by an ordinary knot. This number of strands about the tooth is usually sufficient for an amalgam filling. For gold work it is better to increase the number of strands about the tooth. The ligature may be prevented from slipping from the cervix of the tooth by slitting the cervical edges at two places, and turning out the portion between the cuts. This should be done on at least two sides.

The occlusal portion is then spun or stretched with a burnisher until the natural contour of the tooth is restored, and until it comes in contact with the adjacent tooth. For amalgam work the matrix should not be so high as to prevent normal occlusion. When the amalgam is well packed, the patient should be allowed to close down

to secure the occlusion. The rubber clamp, if it has been put on, must of course be removed before securing the occlusion. Allow the matrix to remain until the next sitting, when it is removed, and the filling is polished.

The advantages of the copper matrix over others are: (1) The contour of the tooth can be restored; (2) the filling can be built up until it is in contact with the adjacent teeth; (3) occlusion can be secured, and (4) the matrix may be allowed to remain on the tooth until the subsequent sitting, to prevent patients from injuring the filling before it has thoroughly set.—W. J. R. Akeroyd, Dental Summary. (From Dental Cosmos.)

Pulp Mummification.—For pulp treatment where mummification is desired, Dr. Hermann Prinz, of St. Louis, Mo., recommends the following formula and method:

Paraform															.One	part
Thymol .															.One	part
Zinc Oxid															Two	parts

Glycerin enough to make a very stiff paste. The thymol should be rubbed up with a few drops of alcohol to obtain a fine powder, the other ingredients are then added and thoroughly mixed with a very small quantity of glycerin. If the paste should become too soft on standing, more zinc oxid should be added, for a stiff paste is essential for ultimate success. After devitalization, remove the coronal portion of the pulp with a round bur, making the bur enter each pulp canal about the depth of its own diameter. Thoroughly flush the cavity; every pulp stump should be clearly visible. A drop of undiluted formaldehyde solution is placed in the cavity and evaporated with the aid of the hot air blast. This is repeated several times. A small quantity of the very stiff paste is then placed in the cavity, pressed into position with a tightly rolled pellet of cotton and covered with a disc of asbestos felt, previously sterilized in an open flame. A thick layer of stiff cement is then carefully sealed over the asbestos. The remainder of the cavity may be filled with any material desired. It should be remembered that formaldehyde is a powerful irritant to the soft tissues, and proper precautions used. Pain may follow the operation outlined, but it usually ceases quickly, and no palliative treatment is necessary. The pulp stumps do not shrink to any appreciable degree; they change into a solid mass of brownish color, and only the apical ends remain semi-solid .- The Pacific Dental Gazette, September, 1910. (From Dental Brief.)



(Iowa State Dental Society, May 3, 1911)

THE PRESIDENT: In approaching the next subject upon the programme I wish to make one or two preliminary remarks. The Chair, in so far as he is able, will not permit a discussion of the validity of the Taggart patents; we are not discussing those; it is a discussion of the Dental Protective Association. I shall also attempt to cut out or call down any man who gets personal in this matter in any way. We want a fair and open discussion of this question that is so intensely interesting to every member of the profession. So if I call you down on some point and ask you to back off of some line of argument please take it that I am trying to keep the argument on the question before us. Dr. Summa, of St. Louis, has consented to outline and lead this discussion on this matter.

DR. SUMMA: Mr. President-Gentlemen of the Iowa State Dental Society. I am glad that the chairman has in this instance stated in plain English that this matter is to be a discussion of opinions and not a discussion of persons. There is no opinion on anything that is not backed by some person, and we must try as much as possible to forget the person; and I hope you will forget me. I am merely a dentist who takes an interest in some of the matters which come before us, and one of the matters that came before the dental profession that was a great boom was the cast inlay of which Dr. Taggart of Chicago, whom I am glad to say is present, and whom I met for the first time to-day, is the patentee. When this matter came out there were a great many dentists, and I among them, who did not realize that this process was patented. We began to use it. Everybody liked it; suddenly we were informed that a gentleman in Washington, D. C., a fellow Washington dentist was selected in order to expedite matters. Now I am going to try to tell the truth, gentlemen. If I make a mistake it will be a matter of ignorance and not willful distortion of facts. That is my understanding of it. This case was taken to court, and you can readily understand that when any of us are sued it is a serious matter and a man feels very much lost if he has not some friends to stand by him. When I first heard of this matter, being a member of the Dental Protective Association, I wrote to the head of that association in regard to its attitude whether we could expect protection until the validity of that patent was proved, or what we could look for. The reply I received was that there were no funds to carry this on, and, in fact, that they could not take it up at the present time. Now the first thing we had to consider was that the so-called process patent is invalid. If I am right, and Dr. Taggart is here and will correct my statements if I am not right, it is manipulation of material through certain steps to accomplish a certain result. To the best of my knowledge the machine which we all know Dr. Taggart invented, which is a most ingenious thing, is not involved in the suit. This question is still hanging fire in the courts. The court will decide upon the validity, and therefore neither you nor I can judge whether this patent is valid or not. Even if the patent is valid there must always be a question in the mind of the profession whether a process patent should be welcome, should be encouraged. That is a thing that needs deep thought, and I think there are gentlemen here who can take the other side of the question, and who will enlighten us upon their views. Personally I have always had a feeling that we do not want process patents. I think the feeling of the profession in general has been to that effect. That is one question that is before our minds. Then came the other question which perhaps stirred me to activity into inquiring, in combination with others who felt like I did, in regard to being protected. About two months ago there was sent broadcast throughout this country a new set of laws by the Protective Association, and I assure you that I for one was very much surprised to get them. These by-laws, as we understand them, were revised to

suit the present contention of controversy in regard to Dr. Taggart. Dr. Taggart, I said, gentlemen. I beg your pardon. I did not mean anything personal. I meant the doctor's patent. If I make a mistake of that kind I want you to eliminate it. Now that was a thing I could not understand, and I do not understand. stand to-day, and I am frank to say that I am opposed to it personally. It seemed strange to me first of all that the Protective Association that worked all this time under constitution and by-laws, or, I assume that they did, and, in fact, I have heard from authentic sources that they did, and these were evidently sufficient to stop the prosecution and persecution of the International Tooth Crown Company years ago. They covered that field well enough evidently, judging from results. In order to handle this new controversy it was deemed proper to give us a new set of by-laws, and these by-laws contain certain things that seem unfair to me and to a large number of men whom I have consulted in regard to the matter. I wanted opinions. My first attempt was to get together members of the Dental Protective Association and see what they were doing. It was impossible for me to gain knowledge of who members were. I wrote to the Dental Protective Association for a list, and was told there was no list, and that the books were in too much daily use to be loaned out for a copy of the member-Well, that ended it. I could not get any farther there, so I asked everybody that I could meet with, and the majority of men agreed with me that they did not feel like signing the by-laws that were submitted to us, and which we understand have to be signed before we can take the immunity bath. It is not a matter of \$15.00, or a matter of \$50.00, to a great many. While we all work hard for our cash, that was not it. It is a matter of principle with me to sign away certain rights which I believe I ought to have, and which I will try to stand for until the court compels me to surrender. (Applause.) First of all, this set of by-laws, which we are told we voted on by our silence, and I assure you that I for one did not know that this was coming off, and I was watching it, we sanctioned it, we are told by our silence, created a board of three directors with what you might call infinite powers. I well realize that such an organization could only be handled if a committee of a few men got considerable power. I appreciate that fact, but the powers granted in there seem to me to be extreme and perhaps the most extreme example is that these three gentlemen—or this committee, composed of three gentlemen, it does not matter who they are-can, upon seven days' notice to themselves, change and amend these by laws. That is a serious proposition for any man to sign, as I look at it. It is all right if in good hands, but is very bad in bad hands, and it merely matters whether a man wants to chance that, not knowing who your board of directors might be. In case of death, or anything else, the two remaining members can select the other one, as I understand it. If I make any misstatements, gentlemen, it is not a matter of willful lying—it is a matter of ignorance, and call it such. Talk plain to me. This set of by-laws includes the recommendation specifically in one of its sections for members to pay to the patentee of the cast inlay \$15.00. The sum is certainly reasonable enough. The sum is nominal, as far as that goes, and I believe that all fair-thinking dentists will believe with me that it is very reasonable and should Dr. Taggart-or the patentee, pardon me-have asked this of the profession, I, for one, should have sent it very rapidly, but I did not like to send it through a protective association. I believe with a great many others that the function, the object, of the protective association was perverted in its by-laws. I believe that sincerely, and while we are told from the other side that that is not the case, I am ont yet convinced as to the correctness of that. I disagree most sincerely and earnestly. No personal feeling in the matter whatever—just as I might disagree with a man who said: "Put a gold filling on this tooth," and I might not want to put it on there. I merely disagree as a matter of sincerity and sincere conclusion. Now, why does the Dental Protective Association want \$10,000 from nonmembers that are allowed to take the immunity bath from this patent. I do not mean immunity bath in any sarcastic sense. I do not know how else to express it: Freedom from prosecution. Right to use the matter. That is a question that comes to many of us. If this patentee establishes the validity of his patent he will undoubtedly have the legal right to collect from all of us, and there are many, I admit, who will not pay willingly. I am sorry to say that it has happened in this profession that men who have done good things for the profession have died in unfortunate circumstances. They were unhappy business managers perhaps, as I think has occurred in this instance. We do not know what things have led up to it, but I still have a faint idea it could have been done. The fact remains that a good many men do not pay willingly, and a great many men need a club; there are some that do not, and I hope I belong to that class myself, but I do not like to pay through a protective association. That thing seems wrong to me. Why not

make this free and open to everybody? As a result of this discussion, in order to bring the matter before the profession, a number of gentlemen have signed a call to try and make this committee in Washington, who are assisting in the defense of Dr. Boynton, a permanent thing. It is about incorporated now, so that in case any injustice should be practiced, or seeming injustice, we have some means of helping ourselves. It is the matter of precedent that I object to in this particular instance. If we give in to this process claim through the protective association, we do not know what moment another thing like that will come along. We must have a protective association. We know it was announced at the National Meeting at Denver that United States Senator Cullom, of Illinois, introduced a bill a little over a year ago-I do not know the exact date, but it is immaterial-to renew or extend the old crown and bridge patent. We are about to face that issue again. We have been up against that once before, and that seems to have been a very unjust persecution. Some of you gentlemen who practiced before my days have had that trouble with rubber—the old Josiah Beacon patent. I presume he was at least the manager of it and chief dealer in that proposition. Now I believe that we ought to band together to protect ourselves against injustices, against things that seem unreasonable, and I think we have a perfect right to air our views from this side and consider it just as well as the claimant on the other side has his right. I am exceedingly glad that Dr. Taggart is here, and I do not know Dr. Crouse, but I have been told that he is here, and I presume that they will give us their version. I do not know that anything else can be said in regard to this matter right now. I believe that that will open the field in every way, and I hope that I have done it in an impersonal manner. That was my attempt. If I have failed it was a failure of the head more than the heart. There is no sense in us getting together when we discuss any proposition on which we may differ and getting personal, and I would ask any one that takes this matter up to be just as

impersonal as possible. I thank you.

THE PRESIDENT: The time is getting late, and I will try and limit the discussion as much as possible. If a man is talking strictly to the point I will permit him to finish his paragraph or his thought, and then call him when three minutes is up. The matter is open for discussion. (Repeated calls for Dr. Taggart.) Dr. Taggart is called for. If there is no objection we will hear him, if he cares to take

the floor. (Applause.)

Dr. Taggart: Just a moment. Just at the present time I think it will be better to let the others discuss this matter and let me pick out the points that particularly touch me and mine. This other proposition of the Protective Association is another issue. I do not care to discuss that, except when these statements come in. Then I want a chance to help Dr. Crouse, or the other new organization. I do not care to discuss it personally until it hits me.

(Dr. Crouse called for.)

Dr. Crouse: (Applause.) It is seldom that I take notice when a man calls me a thief. When these circulars were out and the word went out to the country that I was standing in with Dr. Taggart and getting a slice off it was beneath my dignity to answer such a question. I have been before the dental profession for twenty-four years, fighting their battles free of any expense, except the membership fee, without any compensation, giving my time for twenty years cleaning up all the dental patents in this country. This has been my work, and I do not think that I need to make any apology. Now I will say about the Carmichel patent: We got the decision of the court against that patent, and he has taken it to the Court of Appeals, and that was argued two or three days ago. That will wipe that out, and then the Protective Association is virtually through with patent litigation. Now, what took place? I was called to the witness stand in the taking of the testimony in the Taggart suit, and I asked to see the testimony that was put in. After I examined it—and I think I am a good judge—after I examined the testimony I made up my mind that Taggart would win in the suit, and if he won whether he held it or somebody else the dental profession were at the mercy of the patentee then if his patents were made valid. My first move then was to protect the members of the Protective Association. My first move was to put a collar on Taggart to have a limitation on what he would charge. Now that is the whole thing right here. And how did I do it? The only question in my mind was what was fair to Taggart. He and I have always been friends, but I did not want him to get too big a lot of money, and I called meetings of the dentists, went in through their offices and discussed it with them; called two different meetings in Chicago. I got at what would be fair to Taggart, and what would be a fair consideration, and I came to the conclusion that \$15.00 would get him as much money-if each fellow who was using his process paid the \$15.00-that would get him as much money as he ought to get out of it. On the other hand, it has been my life ambi-

tion to leave the Protective Association in a permanent form when I died so that there would be a fund whereby the man that came along next could be paid for the work that I have been doing for nothing. Work! Why, within two or three years I have been offered \$20,000 a year to take charge of the patent business of a big manufacturing concern in Chicago just to do exactly what I have been doing for twenty years for the profession for nothing. Now let us get at the by-laws. I admit it is a one-man power, and I would not have gone into such a fight as I had to go into to take up first the Rubber Company and then the Crown Company. I say I would not have gone into it without I was where I could not be trapped and thrown out at the proper time. I want to tell you now that three different times the enemies of the dental profession have tried to throw me out on that very thing-tried to get another committee and another chairman so they could handle him. These are all matters of fact, and the by-laws I had drawn up by one of the best constitutional lawyers I know of. I told him when I got this thing to going I wanted to get it so that a set of fellows could not get behind me and stab me. I wanted it to be a one-man power, and it is the only way to run that kind of an organization. If it is not run in that way then you have a chance to throw him out. Now, so much for that. Now, as to the by-laws as amended: I do not know the exact amendment that was objected to the most. The only alteration we made of any importance was that this entering into the agreement and accepting the conditions and not organizing to fight Taggart or put up a defense against him, and that was one of the reasons why I got this agreement. That was one of the considerations on which he would adopt that agreement. Now I was in power. I had the whip hand, because I had the association and money to back it, and I knew that Taggart had not got the money, because he spent his money perfecting this and putting in the testimony, and all that sort of thing. I knew I could wear him out, and he knew it, and his lawyers knew it, so I could dictate the terms and the terms I dictated was the \$15.00. Now, then, the Protective Association is the one that has accomplished this. If you had not had a Protective Association you could not have done it, because there was no other organization that could have banded in that way. It has been my ambition to have the Protective Association reorganized, and I am going to reorganize it, and increase the membership from 5,000 to 30,000, so that when I die that will be my monument. That is all the monument I will ask you for, and I am not asking anybody to pay for it, either. Now, a misunderstanding came, of course, by their not understanding my motives, what I was driving at, but the men who have been with me in this time have seen what a time Taggart and I have had quarreling over this thing, and there are several of them. Dr. Johnson was one of them who spoke out in an editorial in the last issue of the Review, and stated he was one of the board of directors, and they kept Taggart and I apart several times for fear we would break absolutely. I told him: "Now, you will sign this up as I have got it, or else I will take the other side, and fight you on the other side. I can organize the profession for a \$10.00 fee a year, and \$25.00 fee for the whole thing," and finally he signed it up. I think it was the best thing he could have done, because I am getting him quite a bunch of money. Now, on the \$15.00-fee business: It is a very small sum; it is less than a dollar a year. But you talk about going out and getting that from dentists, getting them to pay that \$15.00 unless compelled to. You have not worked with them as I have. I have been in the game twenty-five years, and I know what it means. They are not paying anything unless they have to. The dental profession are small potatoes. They don't pay unless they have to. Their very business makes them small—looking out the back windows and looking into peoples' mouths; the very occupation is narrowing, and I think it is one of the greatest reasons why the dental profession is small, but at \$15.00 you would think they would pay that on a process that has revolutionized the practice of dentistry. It is worth a thousand dollars a year to me alone in the business in the advantages that I get in the way of practice, the things that I can do that I couldn't do before, so that my practice has doubled in that line, and I get bigger fees and can accomplish a great deal more for my patients and therefore get a great deal more for it. That is what a dentist ought to say, and if every one who is using this would come in and throw in \$15.00 it would end the matter; but it won't end it unless Taggart can establish the validity of his patent. If he can, they would tumble over each other to get in, because there is no other way, except to come into the Protective Association. I have fixed it that way on purpose. That has been my plan, and I had a right to do what probably another man would not have who has not worked all his life giving the time that I have given to my profession—cleaning up these different things. Now, remember this: I have no feeling about people getting suspicious, and I want to mention the process patent first-the process patent. Now the reason the dental profession are so sore

on the process patent is because of the old Cummings patent. The vulcanite patent was a good one; would stand in any court. When they went to work and got their fees out of that they said, "Now, it is too bad; the dental profession are educated up to paying fees; let's keep them at it." So they reorganized and brought out the Cummings patent, which was on the different steps of packing rubber and vulcanizing it. That made it a process patent. That process patent was not worth the paper it was written upon. I went out and tried to get the money after I had shown in the Supreme Court that there had been collusion, that the Rubber Company had hired the attorneys on both sides and the Supreme Court remanded that decision back to the lower court for rehearing. Then I went out and tried to raise money by subscription, and I tell you it was tough work. If I could have had \$5,000 I could have beaten that Cummings patent. I saved the dental profession a great many millions of dollars. There are men here who remember that they came once a year for \$100 royalty for the old Cummings patent. Now, that is why there is such a prejudice against process patents.

Barnum gave the rubber dam to the dental profession. He applied for a patent. I applied for the same thing, only I had oiled silk. He came to where I was practicing, and showed me a process that would have been a process patent in the handling of the rubber dam—a process of handling them. Barnum died a pauper; had to raise money to pay his expenses. That shows the liberality of the dental

profession. Now, then, the Cummings patent.

THE PRESIDENT: Will you please confine yourself to the discussion of the

Dental Protective Association and the Taggart matter?

DR. CROUSE: I think I am. I am telling you the needs for a protective association. If we had not had a protective association when that was on they would have bankrupted half the dental profession when they came on to us and made us pay several hundred dollars.

THE PRESIDENT: The point is this: Why is it that the Dental Protective Association has completely turned coat from protecting us against process patents to

now furthering a process patent?

Dr. Crouse: That never was the object. In twelve circulars that I looked over that I sent out in the last twenty years, in twelve of them I announced that the object was not to rob a man of his rights, but to stop abuse in the dental profession. I have always contended that the cry about process patents was wrong; that half the patents taken out that are any use are process patents. Now, you have thrown me off. I was just illustrating the rubber dam as one of the process patents.

THE PRESIDENT: Your time is getting short. I think the profession, as a whole, here understand well enough the details of it, so that we can get right to

the meat of the subject. I do not like to interrupt you.

I don't think of anything else.

Dr. Crouse: I do not think the dental profession know what I have been at at all. I have been at protecting the dental profession from abuse provided Taggart won his suit.

THE PRESIDENT: What is the object of the change in the by-laws? That is one

of the questions.

Dr. Crouse: Why, one of the things he insisted on was, if he signed this up, that they should not organize. I don't like a presiding officer to interrupt me all

THE PRESIDENT: I beg your pardon, but I want you to keep to the point.

DR. CROUSE: Now, the thing that I have done in this line, when you come to look at it and get all the facts, is the most important thing I have ever done for my profession, because, as I say, I have an idea he will win. If he wins, no matter who owns it, he can sell it out and they can collect probably \$100 a year royalty on that. And it is \$15.00 for seventeen years on all the patents he has got, and the people who have watched me in this, and know what I have been through, recognize it as the most important thing I have ever done for the pro-

Dr. Summa: Mr. Chairman and Gentlemen-Now we have this question that is not very clear to my mind-one of the many, and it is this: We were told by Dr. Johnson in the editorial referred to that we do not understand what protection meant; that if Dr. Taggart had wished he could have sold out for a large sum of money. Now, I take it that it is the duty of the protective association to say to Dr. Taggart, "The validity of your patent is not yet plain, is not yet established. Until it is established I must be the protector, the legal advisor, of the profession. Then, when it is established you have a legal right to collect, but look out you do not practice extortion because then again I may have to protect the profession. That is merely my conception of the matter and that of a number of gentlemen I

have spoken to in regard to what we mean by the Protective Association. He goes on before the patent is established. (Applause.) That is the thing I would like to have explained, gentlemen. I do not want to show any personal feeling, but I am talking loud so that you may hear me. That is my idea—just simply to tell me why the Protective Association does not protect before the validity of the patents is established. We are not blaming Dr. Taggart. The patentee is not in this at all. If the patentee opens it up and this is open to the profession we are ready, but through the Protective Association to make such a claim I think is wrong and incorrect. It is not the conception of protection that Americans have or people have who have studied the English language.

DR. CROUSE: Am I not protecting the dental profession in just the way I am doing so that there cannot be any abuse in case he wins his suit? I would not fight it, anyway. I think Dr. Taggart is entitled to great consideration for what he has done in the way of perfecting that process and placing it in our hands, and therefore I would not fight it, and I wrote the people at Washington that I was opposed to fighting Taggarts' claims; that I thought he was entitled to them.

DR. WHELPLEY: I would like to ask why it was that they were so active in fighting these other patents on processes and how, in his opinion, this will win. That that is his individual opinion we will, of course, grant, and it is much better than ours, but nevertheless it is Dr. Crouse's individual opinion. Why did you change the by-laws of this association? We have been members of that association for fifteen years.

Dr. Crouse: I told you that was one of the considerations which Dr. Taggart wanted. I could not make the agreement all myself. I had to give him some mild concessions.

DR. SHURTLIFF: You had no authority to.

DR. CROUSE: Yes; I did have all the authority.

Dr. Shurtliff: That is the reason we don't want to belong to that association.

DR. CROUSE: The by-laws in that respect are not altered at all. The board of directors have always had the power to do all the business in their own way. The old by-laws are just the same.

Dr. Whelpley: You would not have gotten our thirty or forty thousand dollars if we had known that.

Voices: No. no!

DR. CRANDALL: We certainly would not; that is a collection agency, not a pro-

tection agency. (Applause.)

DR. CONZETT: I do not believe in throwing rocks at a man who has done as much for the dental profession as Dr. Crouse has in the past. (Applause.) Dr. Crouse has been the protector of the dental profession in the past, and I think it is a mighty small man who will stand up here now and throw rocks at him when he does not know the position Dr. Crouse has taken in this matter.

DR. WHELPLEY: We want to let him explain it. He is here.

DR. CONZETT: He is trying to, if you will have patience; but I do not believe it is necessary to insult him in the manner in which he has practically been insulted by the questions from the floor, and I simply rise to fair play. I do not believe that we have any right to treat a man who is attempting to explain his position as Dr. Crouse has been doing from this platform to such remarks as have been made from this floor. And I simply rise to protest against a thing of that kind. I have no interest in Dr. Crouse any more than I have in any other man who may get up here and attempt to explain his position, and knowing what Dr. Crouse and the Dental Protective Association have done for the dental profession in the past, I protest against such treatment. While I am on my feet I just want to enter into this matter for a few moments. And I want to say that there is no man who has arisen—and you will pardon me, sir, if I indulge in a few personalities, because it is absolutely impossible to discuss this matter unless we do; we cannot eliminate Dr. Taggart from this discussion, because it is absolutely wound around Dr. Taggart, his personality and the process which he has given us-there is no man who has arisen in the dental profession since Dr. Black gave us his series of experiments in '91 that has done as much for the dental profession as Dr. Tag-(Applause.) I know that, you know that, and everybody knows it. Now, it would not have been necessary for the Dental Protective Association to have entered into this at all if you and I had done our duty by Dr. Taggart. (Applause.) Dr. Taggart would not have found it necessary to have gone to the law if you and I had played fair with him. The fact of the matter is, that Dr. Taggart came to us with that magnificent system perfected. We will not enter into the legal status of the cast at all. It may be, and undoubtedly is, a fact that there have been men here and there who, before Dr. Taggart perhaps, made inlays along

this, that and the other line, but it was not given to the profession; it was not perfected, and you and I did not have the results of it. Dr. Taggart came up and by his application, genius and hard work has given us the splendid system of the gold inlay. And not only that, but he has given to our profession of his money and his time because it took time and it took money and a tremendous amount of energy to perfect this. Now he gave us this, and because of a lack of business acumen perhaps, because he did not think that the profession he was going to benefit so tremendously, would come right out and—pardon me if I say it, but it is the truth—steal the thing which he was giving them, so he went down to New York, and he gave the profession the result of his labor on the gold inlay, and did it then because perhaps of a lack of business acumen. I do not think it was a good business proposition. He should have had his machine ready at that time; he should have had everything ready to give to the profession, and he would have been a rich man to-day. But because of a lack of business acumen, as I said before, he did not do that, and immediately there sprang up all over processes and instruments and machines for the making of the gold inlay, and they were bought right and left, and when his instrument did come out, when his machine did come out, they were a drug upon the market, and it was impossible to sell them, because the men preferred to buy the cheap machines and use Taggart's method and let Taggart get out the best he could. Now, while we cannot afford to pay Dr. Taggart \$100 for a machine when we can get one for \$10.00-while we can do this we cannot afford it-but we can afford to give him almost anything rather than give up the inlay. That is not the proposition, of course, but, then, Dr. Taggart came out and said, "Well, we will let that all go by; if anybody will send me \$50.00 they can have the process and they can use any of the machines they want." And the profession said-

Dr. Summa: Where was that published?

DR. CONZETT: In several journals with Dr. Taggart's sanction. DR. SUMMA: With Dr. Taggart's sanction, was it?

DR. CONZETT: Yes, sir, with Dr. Taggart's sanction. Dr. Taggart said over his own signature that any man who would send \$50.00 could use any machine he wanted to and he would not be prosecuted. Do you suppose the profession fell all over themselves to send in the \$50.00? You bet your life they did not! Mighty few of them sent in their \$50.00, and so they had to lay down. They said, "Oh, yes, we want to use the machine we want; we want to use the method we want, and if Dr. Taggart will allow us to pay him a little money all right." And he says, "All right; you can do it," but they did not do it, and Dr. Taggart was out all this, and then he went on and it was necessary for him to do so; it was absolutely necessary for him to protect himself and get back a little of that which he had put into the perfection of the method and in the making of the machine; it was necessary for him to bring and push the case, and it was necessary to make the profession pay for that which they were using. Now it comes to this point, as I understand the case, and if I am wrong I should be very glad to be corrected. It comes to this point: That the probabilities are that Dr. Taggart will win his suit. Other patents have been granted to him. The fact of the matter is, that recently the patents which he first applied for after all this time have been granted; the first patents which he applied for four years ago have just recently been granted. Now you and I will be stopped from using this method if he wins this suit and every man who has subscribed to the help of the defense of Dr. Boynton of Washington-every man who has subscribed to the defense of that man-will be an equal defendant with him and have to pay for the process just exactly as that man would have to pay. I believe that that is the legal status of the case. Now if we go into any other association we will make ourselves liable along this line, and so when the Protective Association comes in and makes an agreement with Dr. Taggart whereby they say, "If you will pay \$15.00 now you can use this process for life," I believe that the Protective Association is doing the best thing for the dental association that it can possibly do. If I am in error I should be very glad to be

Dr. Monfort: I just want to say a word to indorse what Dr. Conzett said in regard to the Protective Association and Dr. Crouse. I am a member of the Protective Association and have been for a good many years. I did not join it, Dr. Crouse, when it was first organized, as you remember, for good reasons, but you got me in afterward and protected me, and saved me hundreds and hundreds of dollars, and I will tell you the Dental Protective Association has saved every man in this room hundreds of dollars-thousands of dollars. There is not a man in this room but what is reaping the benefits to-day of the Dental Protective Association over an over again; not a one of you. You do not understand what the Protective Association has done for the dental profession in America. You do not understand what they have done and Dr. Crouse here. I know what he has done. I know how he has stood by the profession in this strife. It used to be every little while a man would come into the office with a patent on some little fool thing and want to sell you an office right. Some of you older men understand it. You don't have them coming in now! They are afraid to come, unless they have got a valid patent. They are afraid to come because they know that there is an organization back of us that will knock their patent if it is not valid. Now, then, when we come up to this last deal with the Taggart patent, I want to say that I received a circular in regard to the agreement. I intended to write my check right away and send it in. Well, I neglected it, and after thinking the matter over I don't know—I did not understand it, and I kept putting it off and I want to understand it. I am glad it came up here, so that we can understand it. But all I want to say is, don't, for pity's sake, throw stones at Dr. Crouse, because you, every one of you, as I say, are benefited more than you can conceive by what the Protective Association has done for you.

THE PRESIDENT: I think it is a misstatement that they are throwing stones at Dr. Crouse. They are throwing stones at the Dental Protective Association and if he is the Dental Protective Association he will have to take the stones. I think there is not a man in the room but is prefectly willing that Dr. Taggart shall have all the credit for all the work that he has done for the dental profession and we are not discussing that, please understand. We are discussing the present attitude of the Dental Protective Association in the Taggart matter. Is that right, or is it wrong? If it is wrong, why, let us correct it. If it is right, let us get behind it,

that is all.

DR. SHRIVER: I want to second what Dr. Conzett has said and Dr. Monfort. I am a little older than some of you in the profession. I paid a royalty on the Josiah Beacon patent for several years. From \$45.00 to \$60.00 a year it cost me for several years; I do not remember the exact amount, and I came very near getting into the other. I was on my way going to a bridge work clinic. The doctor that claimed to be the inventor of that was Dr. Lowe at Chicago. I said, "Doctor, it is kind of tough for me to go there and give a clinic and give the Bridge Company a club to hammer me over the head with." And when I went there they had to kick their agent out of the building where we were giving our clinics. "Well," he says, "if you will write to the company I will second it, and get immunity for you." I thanked them. I went up feeling pretty good; thought I was going to get protected. And there I met Dr. Crouse for the first time. He went up with us on the same train, and I talked the matter over with him. He says; "Don't you do it!" Well, I took his advice and joined the protective association; I paid their \$20.00, and I am satisfied that it saved me hundreds of dollars. It furnished protection, and I never got any more letters from the company. Now, whether Dr. Crouse has overstepped his rights or not I do not pretend to know. I don't think he has from the power that he seems to have. I know this: That \$15.00 is certainly very cheap, and I feel as though I owe it to Dr. Taggart whether he has any right or not. I believe he has done us that much good, whether he has any right whatever to a patent, and I would freely give it to him. I talked with him this morning about it, and I said: "Doctor, the question seems to be that some company in New York has got this, and we are to pay it to them. Now, we would like to pay it to you." Well, he told me distinctly and squarely that that was not true. So I would like to pay the \$15.00 if I can do it and not be under the censure of my brothers

THE PRESIDENT: I do not think anybody would question the great good that the Dental Protective Association has done but that is no reason that it cannot

change its course.

Dr. Summa: You will pardon me, gentlemen, but I led the discussion, and I would like to keep it along certain lines. I have said that the Protective Association has evidently stopped the prosecution or persecution, whatever you may call it, of the Tooth Crown Company. It stopped the rubber business. I do not question that, but I question their attitude now. I might have made a good filling yesterday for a man, and to-day made a bum one, and that good one of yesterday does not recompense him for the bad one I am making to-day. He has a right to criticize me for what I have done to-day. Now, I just differ with the attitude that they have assumed. I am not questioning Dr. Taggarts' research in the matter, not at all. I am questioning the deal that the Protective Association made to collect for him.

Dr. Crouse: Let me ask you a question.

Dr. SUMMA: Yes, sir.

Dr. Crouse: What would be the position now of the dental profession if Taggart would win his suit next week and we had no guarantee as to what we would have to pay in royalties to him and he sells that to a company, say? That

company could go out and collect \$100 a year royalty. But the attitude I have taken is clear, and the most important one I have ever taken. I have got this agreement so that everybody coming into this agreement and complying with the conditions only have to pay \$15.00 to Taggart.

Dr. Summa: Yes, but I believe that the Protective Association ought not to as-

sume that that patent is valid.

Dr. CROUSE: I am not assuming anything.

Dr. Summa: Yes, you are; you are assuming that that is going to go through;

you said so on the stand.

Dr. Crouse: I said it was my opinion, but there is no compulsion; anybody can go into this. There is no compulsion about it at all. You can wait until Taggart wins his suit and suffer the consequences.

DR. SUMMA: But instead of being our protector you have played into his

hands

Dr. Crouse: I have not.

Dr. Summa: Let us assume that we are hiring a lawyer to protect us to the utmost and that man goes in with the other man and, before anything is decided, takes it up himself and himself decides that the decision will come the other way; suppose he goes into a combination with our opponent. I do not think he is protecting me at all. That is the way I feel about it. It is not what the Protective Association has done in the past; it is a matter of difference of opinion as to its attitude at the present time. It is not a matter of what Dr. Taggart is entitled to; it is a matter that he is collecting it through a Protective Association. If the patent is valid he can get it. Otherwise it is a matter of sentiment, and I am sorry to say that sentiment is an uncertain quantity; it is a known quantity when it attempts to loosen the purse string. Let us make it a matter of business. When he has a business claim then let him collect it; until then not.

DR. CROUSE: Don't you think it was important that I should get this agree-

ment before there was a chance of the sustaining of the patent?

DR. SUMMA: No, I do not.

Dr. Work: Mr. President, talking about a lawyer,—if I hire a lawyer to look after my case and I tell my case to him and he goes and makes an investigation, just as Dr. Crouse has made in this case,—he has given his opinion and Dr. Crouse is the lawyer for instance,—(I am not a member of the protection, either, I want to state)—and we hire Dr. Crouse to take our case; Dr. Crouse goes down to Washington; he comes back after looking the matter over; he says, just as our lawyer would say if you go into the city and employ an attorney, he says, "Young man, you had better settle that case; you had better pay that bill and keep out of court,"—and that is the position that Dr. Crouse has taken in the matter,—I don't see why, if he thinks, in his opinion, that Dr. Taggart's patents are going to be validated, I don't see why it is not his duty and the only duty he owes to us and the greatest duty he owes to us to tell the profession that you had better settle it now. That is what any good lawyer would tell you. If he is not that kind of a lawyer and would say, "Oh, yes, let's fight it out," he would make perhaps a little more out of it himself and you would lose a great deal more and he would be a bum lawyer. I would call Dr. Crouse a bum attorney and a bum protector if he did not tell you what he thought was the truth, and I think he is sincere in the matter, and I don't think he ought to be criticised.

THE PRESIDENT: When that lawyer makes an agreement it stops the litigation,

DR. CONZETT: May I be permitted a word? I want to say that I think that Dr. Work has given us the milk in the cocoanut in this matter. If we have employed an attorney to protect us the best protection possible is when he is keeping us from litigation. If it is decided that Dr. Taggart's patents should stand it would cost us a great deal more money in case it came back upon us than now. It would be far better to have a settlement before there would be any suit. Not only that, but it is only fair to Dr. Taggart to do that. The fact of the matter is, that we have not only Dr. Crouse. Dr. Crouse has gone down there and made a study of these things a great many years, and we have his opinion. Now there have been some that think that perhaps he was not absolutely honest in this matter, and you can think as you please about that, but there are two men on this board of directors with him that I do not think any one would for a moment think that they would take advantage of the dental profession. Dr. C. N. Johnson I do not believe would take advantage of any man in the dental profession for one single moment, and Dr. Johnson is associated with him. Dr. John P. Buckley would not take advantage of a man in the dental profession for one single moment, and he is associated with Dr. Crouse in this business. That board consists of Dr. Buckley, Dr. Johnson and Dr. Crouse. When these three men make a study of this thing and

come to me and say it is for our best interests to eliminate all that entirely and is the best business thing we can do to pay \$15.00 and settle this thing, then I am perfectly willing to say that I would rather take these three men's word than to chance going into this thing and perhaps suffering litigation in the future. And that is simply where the question is now, and I believe the best solution of this question is to take the judgment of these three men, pay the \$15.00, and take our immunity bath, if we so wish to call it, and settle the whole business.

DR. BAKER: I feel this way: Dr. Crouse, as the chairman of the Protective Association, has won the cases of other suits against process patents, and it seems to me it is a matter of sentiment between the members of the board of directors and Dr. Taggart that is entering into it now. If Dr. Crouse has won the cases against process patents before, why should not he win the case this time? They are all along the same line, and I cannot see where Dr. Work and Dr. Conzett have any right or anything more than a sentimental case. It is, as Dr. Summa has said, a matter of law and the Protective Association I think ought to have tried to have won the case. There is no doubt but what all feel kindly toward Dr. Taggart, and I think to-day if Dr. Taggart was to drop his suit the members of the dental profession would turn in and be glad to give him \$10.00, \$15.00 or \$20.00, or whatever

would be coming to him.
Dr. Shriver: Mr. President, there is a vast difference between this present case in hand and the bridge case. They were demanding ten per cnt. of our receipts, so that, if we did a thousand dollars' worth of work in one year, we would have to pay them \$100. Now this does virtually settle the case. If you all come in and take the bath that has been spoken of, it does settle it. If every dentist in the United States should do that, it will stop this entirely. But if they do not, and some remain out, they should pay something, and I suppose if Dr. Taggart wins his

case he will go after it as the rest of us would do in his place.

Dr. Whelpley: Mr. President, it just seems that we are taking valuable time in having explained to us what this Protective Association has done. We are very willing to take the advice of our members like Dr. Conzett and Dr. Work. They are men that we honor in this State Society, but what we want to know now is what this Iowa State Dental Society wants to do in this matter, and what the State Society wants to know is this: That if in times past this Protective Association has fought the battles with these patents on processes, why is it that they turn over now and are not willing to fight this one? Have we any assurance that after this one is complied with that there will not be five dozen men in the next five years having patents on processes, and we will have to pay every one of them? (Applause.) That is what we want to get at. We want to know why it is that they are not willing to spend their energies and time against this. I know that if Dr. Crouse can satisfy this dental association that it would be better for us all to settle that case and be better for us to settle all cases that might come in the future we are willing to abide by their decision, but what we are claiming, with Dr. Summa, is that they have not given it a fair chance yet, and we are not sure but what they can have the same success on this patented process that they have had in the past, and if they

cannot win this one how are they going to win those that come in the future?

DR. PHERRIN: Mr. President, I think the dental profession owes Dr. Taggart a great deal of gratitude. We all admit that, because Dr. Taggart is the man who has popularized the gold inlay which we all consider of great value. Dr. Taggart has perfected an instrument whereby this inlay may be made, may be prepared, a process for doing it. A number of other instruments have been taken up and used for the same purpose, accomplishing practically the same results. But now the question is with us whether we are going to buy Dr. Taggart's machine or not. I think that it is untimely that this discussion should be here at this time. If any member of the profession belongs to the Dental Protective Association that is his business with Dr. Crouse. Dr. Crouse is not handling the business for the Iowa State Dental Society. Who made him rule over us? He does not do that. We are here simply to find out the sentiment of this society, and he cannot bind this society to anything until they propose or allow him to do so. He only binds the members of the Dental Protective Association. I am glad that the sentiment is being brought out. Now there is a question as to the validity of Dr. Taggart's claim. That is not decided yet. When that has been decided why then we will be ready to deal with him or through the Dental Protective Association or in any other manner that it may be accomplished. I have in my hand the original patent covering practically the same patent claimed by Dr. Taggart.

DR. WORK: I rise to a point of order. We are not discussing that at all. I object to it.

DR. PHERRIN: I know that, but we want the sentiment on this thing, and be-

fore we rush in and pay out \$15.00 or \$5.00 or anything else, let us have the sentiment. We are not trying to decide on Dr. Taggart's work. We consider it a matter of great value, but he has not perfected it yet. If we want to buy his machine, all right. If you want to buy a-

Dr. Work: I object to the discussion along this line any farther. You called other men down, Mr. President. I did not talk about this thing, and you ought not

to let him. (Calls for Dr. Pherrin.)

DR. PHERRIN: I would have been through if he had kept his mouth shut. can use any kind of an appliance that we like. As soon as the question is decided that Dr. Taggart's machine is the proper one, and all of this is valid, that is all right; then we will deal with Dr. Taggart, or we will allow Dr. Crouse to be our mediator.

DR. CONZETT: The only question which I have in mind to-day is for the good of the profession and for the good of Dr. Taggart as well, because I love Dr. Taggart for his personal qualities and his work and for the work of the profession. the good of the profession I do not want to do anything that would be against the best interests of the profession in this State. Now, I am honest in the assertion that if the attitude of Dr. Taggart was antagonistic to the welfare and the good of the members of the profession of the State of Iowa I would not for a moment stand with Dr. Taggart. The question as I say is simply this: It is for the best interests of the profession for every dentist to pay him \$15.00, because if the patents are declared valid then you cannot come in and pay \$15.00 at all.

THE PRESIDENT: Why not?

Dr. Conzett: He has got a club that he can hold you up with for \$100 a year. Dr. Summa: That is just the attitude that I object to.

DR. CONZETT: I don't say that he will, but I said that he might do it. I do not believe Dr. Taggart would, but he could do that. The only point is for the best interests of the individual members of the profession by paying \$15.00 and coming into the Protective Association you protect yourself now against any contingency which might arise. It does not protect the man that does not come in. If you elect to stay out and the patent is declared valid, then you may be compelled to buy the machine at \$100. If you come into the association now and pay your \$15.00 you can use any machine you want to. You have to pay \$10.00 to come into the association and \$15.00 to Dr. Taggart. Dr. Taggart does not establish his proposition outside of the Protective Association. Dr. Taggart can compel, if he wishes, the buying of the machine by the man that does not come in. Now, it is simply this, and there is absolutely no coercion about it--it is simply a business proposition. You can take Dr. Taggart's proposition to pay him \$15.00, come into the association and be protected against any contingencies which may arise, or you can stay out at your pleasure, stay out of the association, and take the consequences. I do not know what they will be.

Dr. Ror: We have a man with us to-day as our guest who I believe is as competent to discuss this matter as any man in the United States. That is strong, but I believe it. It is the editor of the American Dental Journal. He has published both sides of this case, and I would like to hear from him-Dr. Cigrand,

DR. CIGRAND: Mr. President and Members of the Dental Protective Association, Members of the Dental Profession-I did not wish at this time to be called upon, because, as the guest of your organization, I came for another purpose, but since I am on my feet I want to be fair with my profession; I want to be fair with myself; I want to be fair as a citizen, and I am going to give it to you as I see it. In the first place, Mr. President, I would be a very poor judge if I did not say this—that not more than ten per cent. of this audience know—making ninety per cent. of this audience apparently ignorant-of the case before them. I am talking to you as a member of your profession; I am talking to you as an editor who gave you both sides of the question, and I am talking to you as a citizen. Seventy-five per cent. at least of this audience do not understand the proposition before them, and all this profession needs at the present time-Dr. Crouse or Dr. Summa, or any other man in this room—is just a little more time for conservative, honest judgment. The dental profession is too old and too honorable and too venerable to take upon itself to form a snap judgment. This is a serious proposition; it involves principle, and it involves also personal gratitude, and when principle and personal gratitude are involved it usually makes the jury hang out in the jury room day after day until one or the other has gone by. We are fighting for principle and personal gratitude, the two hardest things to decide that ever come before any jury. And now I am going to ask you here to-day, don't pass a snap judgment; let it be known to the good judgment of the Iowa State Dental Society, for the welfare of

the great State of Iowa you love, that you do not become personal, that you do not get warm and excited, that you reserve for yourself a judgment founded on what? Not on personal points, but on facts. Now, I think, my dear friends, that what this audience needs and what the entire dental profession needs is an honest statement of the facts, and as I have found it and have seen it, I believe, Dr. Crouse, that those who are opposing the situation are opposing it because they do not understand it, and they have a right to oppose it until they do understand it. Now, I know Dr. Taggart well enough to know that he is willing to wait. Dr. Taggart does not want a dollar that he cannot hold up in his hand and say: "This is my dollar that I have gotten by honest means." (Applause.) I know Dr. Taggart. I have known him for twenty-five years. I have taught prosthetic dentistry for that time, and I have known him as a professional man; I have known him as a practitioner; I have known him as a citizen; I have known him as a friend. In all fairness to Dr. Taggart, Mr. President, this whole thing does not concern him one bit. He does not appear in it. As I bring this thing up, it resolves itself into this, Dr. Crouse: It seems that a large number of the dental profession seem to think that changes were brought about in the Protective Association in rather too sudden a manner. Now, any one that knows your personality knows that when you get up to do something you do it very quickly, and you do it earnestly, and you do it strongly, and there are men in the profession who say: "I would like to have seen it done, but I would like to have seen it done slower so that I might have really understood it," and I believe, ladies and gentlemen, that when this thing is thoroughly understood we will be a united profession, that the profession will have gratitude in its heart and principle in its hand. We are all big enough and strong enough and broad enough and fair enough to give Dr. Taggart that which belongs to him. There is not a man in this room that would not, as he walks down the street, take his hat off to Dr. Taggart and feel within his heart that he owes that man a debt of gratitude. (Applause.) Now, then, if that solves that problem, then the only thing to solve is the other thing, the other problem of principle. If the Protective Association-Dr. Crouse, Dr. Johnson and Dr. Buckley and otherswill make it clear to these men that those changes in the constitution are right, they will be friends, but it must be shown to them. I have been with dentists all over this country, and all they seem to want is fair play. Now, let us just simply wait; let us not pass upon this until we are able to settle for ourselves that it is founded upon good judgment, not to value Dr. Taggart the less because we love our profession more, but we can solve this in justice to Dr. Taggart, and we can solve this and be fair with ourselves. If the Dental Protective Association and Dr. Crouse have made a by-law that is too severe or have placed upon its by-laws something that can be changed too easily in view of the fact that too much power may be put in the hands of a few men the Dental Protective Association is large enough, I believe, and broad enough if that is the complaint to make it all along the line. I am a member of the Dental Protective Association, and it has done us a vast amount of good, but because I am a member of it I do not want to do things that are not absolutely fair and honest with all of us. Let us just be a little cool about the matter, because seventy-five per cent. of this audience do not know the proposition, and if you were to honestly vote whether you were one of those to rise you would remain in your seat because it is evident by what has transpired here that seventy-five per cent. do not know what is going on. Now, let us take a little time and get the facts, get the details together and go forward as one great profession instead of straggling divided elements, as it seems to be.

(Insistent calls for Dr. Taggart.) -The Dentists' Record.

(This Discussion is expected to be concluded in the September issue.)

## SOCIETY AND OTHER NOTES

Officers of Societies are invited to make announcements here of meetings and other events of interest.

NEW YORK.

The next meeting of the American Society of Orthodontists will take place September 20, 21, 22, 23, 1911, Boston, Mass. Dr. F. C. Kemple, 576 Fifth Avenue, New York City, Secretary.

WEST VIRGINIA.

The fifth annual meeting of the West Virginia State Dental Society will be held in the Assembly Room, Waldo Hotel, Clarksburg, W. Va., on August 9, 10 and 11, 1911. Opening session at 2 o'clock, Wednesday, August 9.—Frank L. Wright, Secretary.

#### ANNOUNCEMENTS

The next annual meeting of the Indiana State Dental Association will be held at the Claypool Hotel, Indianapolis, Indiana, May 21, 22, 23, 1912. The Association has adopted as the slogan for this meeting, "1,000 members in 1912." New and original plans have been perfected to make this meeting the "Banner" meeting in our history.—Otto U. King, D.D.S., Huntington, Ind.

The Chicago Dental Society has planned for an enormous two days' celebration, January 22 and 23, 1912. This will be the 48th Annual Meeting of the Society. There will be clinics on both days and papers read by the best men obtainable on both evenings.—Fred W. Gethro, D.D.S., Chairman Publicity Committee, 110 N. Wabash Avenue, Chicago, Ill.

On May 4th the Dental Profession of Colorado united to do honor to Dr. William Smedley at a testimonial banquet at the Brown Palace Hotel in Denver, upon the occasion of his seventy-fifth birthday.

Something over one hundred persons were present and it was an occasion that will long be remembered with keen satisfaction by those who attended.

# PATENTS

- 973842. Composition tooth pick, Albert H. Baird, Delta, Col.
- 973957. Head rest, Omar F. Neff, Milford, Ind.
- 973573. Dental cabinet, Samuel C. Sims, Sterling, Ill.
- 973894. Dental instrument, Michael H. Tommey, Greenfield, Mass.
- 974188. Head rest for chairs, Frank Ritter, Rochester, N. Y.
- 974189. Valve mechanism for dental or other similar chairs, Frank Ritter, Rochester, N. Y.
- 975205. Holder for dental floss, Charles F. Booth, Canandaigua, N. Y.
- 975033. Dental impression cup, John H. Gummo, Waverly, Kans.
- 974983. Moulder's flask, Edward T. McHugh, Holyoke, Mass.
- 975308. Fountain cuspidor, James D. Wilson, Webster, Groves, Mo.
- 976112. Jeweler's and dentist's burner, Abraham and C. Zarembowitz, New York, N. Y.

Copies of above patents may be obtained for fifteen cents each, by addressing John A. Saul, Solicitor of Patents, Fendall Building, Washington, D. C.